

分 冊

Separate Volume

出願番号 特願2003-102206

[ST.10/C] : [JP2003-102206]

分冊番号 2/9

CERTIFIED COPY OF
PRIORITY DOCUMENT

acacttgctc tctcaatatg tccntagtttt cttcagcctt ttctggttca gttcccttgt 2400
cctgatctca tcctctctgg tctcccaata actcaccctt gggatgtgtt tagagcgtgg 2460
gaggtgcctt tgagaactgc ttgactccat gatctcctag aacaaaaccg ccctgacttt 2520
acagggggaa cactcatgct gagctgagaa agcagagaag tggcgtggga gccagctggg 2580
ggtgaagagc atttgggcca gtcccgtggc ccccttcaga ttcctcaagc aggattgttc 2640
tgttctaaaa agctgttgca cagcattcgc aatgagatct ttagttggcg gattttctgg 2700
aacatttgtt tttcaacttg tcccgaacatt tttttctgt ttctattctg agagagagat 2760
gatcaagttt taatttgggt ataggttaaa tggaagaaga aacagaactt catggccaaa 2820
gtagacctat agattttgat tgggttcttt gttaacagta gaatgcgatc tttgccactg 2880
actgtagtat taataagggt ttaatgtgag atattcctgc aaaccatccc atttctactg 2940
attgtaagtc agaatttctt ttatcccttt caaatcagtt tctacatgtt taagtgttca 3000
gggcttcac cagcatgagaa gtttgtaatt actgaaagtc tgatttcatt caggacacat 3060
tttttccttc atattttttc tgtgaattta taggctagga aggctattga agcctcaatt 3120
atgggtcttc attttgagat cgttttctat gagctgaact gaggatatca atggttatct 3180
caaaatcgtc ttttaggaga tcccgaattg actcagagtt tgaggagtta gtatcacaga 3240
attagatttt tttaaagcat ttgtacgttt ccattcccaa atatgtagct gtggttcttg 3300
aaaacacatc ctacattgca tatgggcata gcagtttttg acccaggcag aataagttaa 3360
tatttaatta aatattgctt tgaagatggc gctctgggca tgagcatggg gctccatgac 3420
ttcccttcta tcccattgag cccctcctcc atccagcgac aagccatggg catgcataca 3480
atgcagcaag accaacacaa gagcaatatt gaattgttca ttctatctaa aattacatgt 3540
atataaaata tataatttat cttcctgcat ttttgaagta taaagtcata aattgtacat 3600
atctgtaagc tagtatattt gtttctactgt ttgtaatat taagaaatgc tcattctttg 3660
tagaacaaaa atgtattaaa tattttaaaa attgctctgt gatacttaat tttttcccc 3720
aaaatttgta atgtgttgct tctacataag ttctctggaa atatctacaa ctaataggac 3780
acatgtaaat ccttgaagac acatcctgga attcataccc cacaaggaca gtgtgtatac 3840
aaagtatttg cagagcatga cttttatatg tgtgggatat caatgtgtat atttatattt 3900
aaagtgtatt tattgttaca agtctattct ctattatatt ttatttactc tgcggttata 3960
aaaatcacc ttgcatacaa gtttctagtt gccagtgatg ttctggaaat aatgggagat 4020
attacaataa agctacagtt atgacaccct g 4051

<210> 206

<211> 3455

<212> DNA

<213> Homo sapiens

<400> 206

ctacgcgagg aagatggctg catcccagca gcaagcttca gcggttcct cagctgctgg	60
tgtatcgggt cctagttcgg ctggcggccc ggggtccccag cagcagccgc aaccgccagc	120
acaactgggtg ggccctgccc agagcggcct cctgcagcgt tataagatgc tcatcccgca	180
gctgaaggag agtctacaga ccttgatgaa ggttgcggcc caaaacttga ttcagaacac	240
taacatcgac aatggacaaa agagcagtga tggaccata cagcgctttg acaagtgcct	300
ggaagagttc tatgcaactc gtgaccagct ggagctgtgc ctgcgcctgg cgcatgagtg	360
cctgtcacag agttgtgaca gtgccaaagca ctctccaacg ttggtgcca cagccaccaa	420
gcccgcagca gtgcagcctg acagcctccc ctaccacag tacctggcgg tcatcaaagc	480
ccagatttcc tgtgccaaagg acattcacac cgccctgtc gactgtgcca acaaggtcac	540
gggcaagaca cccgcaccac ctgctggccc tggggggcact ctgtgaagtg ggggacaggg	600
agtggggcag gcagtggttg gtgggtggtg tgcaaacgga atgaagagcg tcctgggcct	660
aaacacagca gcctcctctc ttctgcctg agcaccgcag cgggagccag cagggggcag	720
cagaggccaa cagggagctc gcaggccggg cccctgcgtc cctgcccctt ctctctgctc	780
cccctcctag cctagggtag actttgaact gtgtgtgttg atgacttctc tgttccacag	840
gccctcccc attcttgctt ggggtgtggag ccctggctgt cccctctccc tcagtcttc	900
ctgactgtct ccagctggga ggtggtctct gtgtgccact cctctgtgtc tctattacag	960
ttgtgtctct ctcatcctgt ctctttttcc cttgtttctc tgttcctgtt aatgtgtttc	1020
tccccatggg cctatttctc tcaacttgac ctctctctct tagtcccctt tagctgtctt	1080
ctatccccag ctcttaactg ggactctgtg tctatgcagg gggccagcac ccctgggtta	1140
tctggggcta aggggaaggga cttcatttcc agggggccaca gccaagccca gagtcccca	1200
gcggctcgca tgtcagccca gaccccaggg tccttggcct aggagaggag cagtggaggg	1260

gcccaggctc tgagctccac aggtctgagc tgggagcaac tcaggccccc acccaagcct 1320
gcgtcagcgg aacttgagtg aggggcgttg tgcaatttgt ggcaaggctg gccagctgg 1380
atgcctgggt cccagtattt ttagccccaagaggagaagtg aaaaggcccc agccgggggtg 1440
aatcatcagt cctggggaag aaccaggcg cctgagcccc agctccggga agcaggcact 1500
ggggaggggg cttcaaggag ggagtgtcccc ctcagactcc ctgcttcctt ggaagcttca 1560
ggaagctcag cctcagcctt caggcctgag caagtgcagg gcggagctac cagcccaggc 1620
tcagatgttg ggggtgtgaaa gcctcaagtg actcagcctg gttggagaac tgccccaccc 1680
agtatcttct gtgccatgggt tcccacattc gcactccatg gcctcctgtc ctggacccca 1740
cgtctgcaag gaaaccctag gaccatggat acctctgtga ttcacgtga gcccaagtcc 1800
ccacactgga aaactgggaa atggccagct gtgtgtccca ggaaattcct ccccttattc 1860
ttccttgaag tgcccagca tgtagggcaa gaaggaaggc tgaagcgctg tccctaggag 1920
gaatttctcc ttcagggaag cctcagtttt gcccatttat ctaattgaat cagtttttta 1980
cccaatcccc cgattttgta ggataatctc ccttatctaa agtcaactga ttatggactt 2040
taatcacatc tacaaaacac ttccatggcg acagctagat gagtgtttga ataactggga 2100
ctgtagcccc tccaagttga cacataaaac tgaccatcgg gccggggggcg gtggctcacg 2160
cctgtaatcc caacactttg ggagcccagag gcgggcggat cacaaggtca ggagttcgag 2220
accagcctgg ccaacacggt gaaacccga ctctactaaa aatacaaaaa attagccggg 2280
tgtggtggca cacacctgta gtcccagcta ctcgggaggc tgaggcagga gaatcgtttg 2340
aacctgggag gcagaggttg cagtgcagca agatcacact attgcactcc agcctgggcg 2400
acagggaag actctgtctc aaaaaaata aaaaactgac catctagtcc ttgtcatctg 2460
ggcaccaca cacatctct taaccacact taatctccaa ataagtacga taacatagtc 2520
atagtcacac ccaacatgat gcagttatct tgcatacaac tgaagacaac taaccctttc 2580
cccaacagag cccaccagca gtggtggaga tgtcgggtcca tgagcgaca cacaagactg 2640
agggactgtc ggccctccca ggtggtgtca acacaacatc acacacaggt gggggggcct 2700
gatagcccag cacccatgat acagggccta ccaatgctta aaaccacacc caggagccc 2760
acagaggcac tcagtgggtg gtggggtgat ggatacacat ctatcaggca caggcgagg 2820
gtgggcacca ctgagttgca ctcagcaaac acattgggta tcttgtgccc aaggcctgta 2880
tttgtggagc tgatgttcta gtgagagaca gtaaagtga caaaagtaaa atatatcaga 2940
tggtgagaaa acagaaaaat gagatcagaa gtggagatgt tggggccagg cacagtggcc 3000

caggcctgta atcccatcac tttgggaggt gcaggcaggc agatggcttg agcccaggaa 3060
 ttcaagacca gtccgagcaa catagcaaaa gcccttatct gcaaaaaatt caaaaattag 3120
 ccagggtgtgg tgggtgcgtgc ccaggttccc aggtactcgg aggctgagag gtgggaggat 3180
 gccttgagct tgagaggttg aagctgcagt gagctgtgat cgcaccactg cactccagct 3240
 tggttcatgg agaccctgtt tttttaaaaa aagaagtgga ggtgtttaca ccagcaaaat 3300
 actcattttt taagtgtaat taagttgaag atcaaaaaat ggaaatgtat aattaaatca 3360
 tacttagcaa atctaacaca tgaaatgtaa catctgcata tggagaatcg tgttacttta 3420
 ttgaaaaacà ttaaaagttt gagaacttaa gttgg 3455

<210> 207

<211> 3151

<212> DNA

<213> Homo sapiens

<400> 207

ctctcaataa actaggtgtt gatggaatat atctcaataa gagctattta tgacaaaccc 60
 atagccaata tcatactgaa tgggcaaaaa ctggaagcat tccctttgaa aaccgtcaca 120
 agacaaggat gccctctctc accactccta ttcaacacag tattggaagt tctggccagg 180
 gcaatcaggc aagagaaagc aacaaagggt attcaaatag gaagagagga agtcaaattg 240
 tttgcagggtg acatgattgc atatttagaa aactccatgg tctcagcccc aaaactcctt 300
 aagcttataa gcaacttcag caaagtctca ggatacaaaa atcaatgtgc aaaagtcaca 360
 agcattcgta tacaataata gacaagcaga gagccaaatc atgagtgaat tccattcac 420
 tacaacaga ataaaatacc taggaatcca acttacaagg gatgtgaagg acctcttcaa 480
 ggagcactac aaaccactgc tcaaggaaat aagaggacac aaacaaatgg aaaaaaatat 540
 tctatgctca tggataggaa gaatcaatat cgtgaaaatg gccatactgc ccaaagtaat 600
 ttacagattc aaggctactc ccatcaagct accattgact ttcttcgcag aattagaaaa 660
 aactacttta aatttcctat ggaaccataa aagagcccat atagtcaaga caatcctaag 720
 caaaaagaaa gctggaggca tcaggctacc cgacttcaaa ctgtactaca aggctaacca 780

aaacacatac agaggccaat ggaacagaac agagacctca gaaataacac cagacatcta 840
cctaggaata caactgggtct cgaactcccg gcctcaagtg atcctcctgc cttggcctcc 900
caaagtgctg ggattacagg catgagccac tgtgcctggc ctatttttagc ctttattacc 960
tgtaaatctt taaagccatt tcacttagtc aatgtagata gttgaagtga tagaaatata 1020
gttttagagt ttactccaa aattttatct aaaatttaac ttgttgaatg ctttcatact 1080
atcctgccta tacgactgaa ttatagatt ttatgtaaac ttagccacca agttgtcaat 1140
gttttagact tacttaccat ttctaaaatg gatggccggc cttccagttg gatatgaaca 1200
ctggcttctt ttccactttc cattttccca aaattacaca agaaatttaa acaatgtgga 1260
tcagctttta tgcagtactt gaagggaata taaaagtgtc acattaaaat tttcaacatt 1320
ggaaaatatt tttaaaatat ttatataga atttaatat tactctaata gcattttgaa 1380
aatcatcttt ccataaatat gaaattaaac atctgctttc cttagtggca tttaaattac 1440
ctttaaaca gacatgaatg ttgttttct aaattataat aaagtattta aactgcagca 1500
tatgttctta ttatttgtat taacataatc ttctgggaca gaatttttaa aaaatgttcc 1560
taatcagagt cttgctaagt tacgtattct ttgtttgttg taaaacatgg atcatttcaa 1620
ggtgatgact gcttctccag ttctttttca tacattcact aagctgaaaa gaatgaaaat 1680
taacccatgc cacaagggt gccaggtga agacaacctc ttggtgtcct gaagggtctg 1740
gaacaatgtc ttgttgga atagtgggca ttgttagat aaaaaaatga aactgtataa 1800
catttttttt ttcttttttg agatggagtc ttgctctgtc acccaggctg gactgcagtg 1860
gcgtgatctc ggctcactgc aacctccacc tcccggattc aagcaattct cctgcctcag 1920
cctcctgagt agctgggatt acaggcacct gtctaatttt tgtattttta gtagagacgg 1980
ggtttcactc tgttgccag gctggtctcg aactcctgac cttgtgatct gccacctcg 2040
gcctcccaaa gtgctgggat tacaggcgtg agccatcaca cccggccaac atgtttatat 2100
atgggataga ccctgggtct atctcaactt tccaaccatg cttgttcctt ccacgcaaga 2160
atactaccta aacttgtctt ctctcttatt attgaagtga cagctcaaac ccattgactt 2220
gattttaagt gtctcacttc tctgttgga agcaggaact acaacctgaa aaactgaaac 2280
ttaccaatag cctcttatca gtcttgga agaactggac tatgcctttc aaggtctgca 2340
ttgactctt ttgctgctt aatgcacaca ctctttgata attttcaaag tggcattctc 2400
cagtagtagt ctatgaagac agaaagcaag agaaatctta tctttcaaca ctggaaaaaa 2460
cagcaaaaag caacctggtt ttaaaagtct cagtagctta tctttgctaa aatatatcaa 2520

gtacctctga aattgtagaa atttttttga cagatttggg agtgattaaa tgtctgtggc 2580
 agaaacacaa aaaccagcc aaattacagc aggttggata taggttctaa gctgataaaa 2640
 tggccttaac cttgcagaaa tgtgaaaaat gatattggaa cattagcatg acattaaata 2700
 tttctttgcc tttataggcg aaacaatata acaccatatt cttctctcta aatctggaat 2760
 ttaaataagga tttttaaaaa tcagacctca aacctattta gtagatttgt tgacttttgt 2820
 cttcaacctg ttaagctcaa aacaattctg atggaaccat cagtgaaga atatcggttc 2880
 ttaagaagtg gtttgaatag tgcttcctta aaaaaaggct ataatcctca tatttgcaca 2940
 gtagtttcaa gttttatgaa gaattctact aatagaagtt acctctatag gtccatatca 3000
 cacaacaatg tatcttaaaa taattattca atggagatgg tagaatatag ttctgttatt 3060
 taaatcaaat gtaaaagttg cactgtaact ctacagttct aaagaaatgt ataatttca 3120
 aagcataact caataaatgc atggtgaatt c 3151

<210> 208

<211> 3902

<212> DNA

<213> Homo sapiens

<400> 208

tcaacctaga tcccttgcag gcgtagttca caatagtgtt cgcattgccta tgaaaatcta 60
 atgccccttg caggaggcag agctcaggca gtaatgcatg cttgcctgct gctcacctec 120
 tactatgcag cccggttcct atcaggccac agaccagtac cagtccacag cccaggggct 180
 ggggaccctt ggggtgtctt ctggctcctt tgcactacct atgccaccag gcttagcagc 240
 agtcctagaa acaggtgtat caagaagact ctgctcctgg tgggctgggg ctgagatggc 300
 agaggcccat cccatcatat gccagaaaga ggacacactt gtgagtccag gacttgggac 360
 tctacagttt gcagctctgc tcagactggc ttctgggcag ctctcactt tgccattaac 420
 tcctcagagt caagccccag atgccccttg gaccagcccc actcctaggg tcatctggtc 480
 agggctctga ggggtgacgc ttctactgac aaaaggattt taatttttgt cctatcccta 540
 gtgtagtccc agccagtctt tggtagtac ccacttttcc tgctctgaca gagatgggcc 600

agcccctcac ataggggctg ctcccgggaa aggctcatcc acaggctagg cctctgccgg 660
gcctgctgcc agccactgag cctttggcga ttgagagctg actcccgact gaggtgtagg 720
cctccgtcca gccagcacia agggaggcac atcccttgca gcagtacca cagcccctgt 780
cacggcaggc tgtggccaga ccctgattga gtggctccct ctcagccatc tgttcagtca 840
cccagaaaca agtcaagtca aagctcccag tgagttcctg cctcagccat ttggtgtcac 900
aaggaaagcc agggcgttgc cacttcctga tttgggacaa gatgtgtaaa tgcattgagc 960
ctcagactcc ttatctgtag aacttggggg aatgataact acttcatggg gttttaagaa 1020
ttccatggaa tcacagatgg aaagagccta gatgtactat gcctgactcg ttggagactt 1080
cacataaaag ggttttcagc tgctgccacc cccatctttt aagtattttc acaattccat 1140
acacctgggc ctggcaaaaa gaatttcatt cctgttcac ttacttgaaa acccctcttc 1200
ttttttttcg agagagaggg tctcactgtg ttgccaggc tggagtgcaa tggccaaatc 1260
tcagctcact gcagcctcaa cctcccaagt agatgggact acagatgtgc accaccatgc 1320
ctggctaatt ttatTTTTTg tgagacgagg tctcactgtt gcctaggctg gtctcgaatt 1380
cctggactcc agcaatcctc ccgccttggc ctcccaaagt gccaggatta aggcacgagc 1440
caccacgccc agcctgaaaa ccggttttcc tgagggaaaa ctgttctgga agtcaacagc 1500
agagtcgctt gccagggccca cttctaatat tgatgagatt ctggcctgtg ctcccctccc 1560
tcatactttg tgtagcattg tgactagaga ttgggtaaaa agggaagacc ttgccaaatg 1620
ttgccacct gctaccctct ccggtgtct gctgacgttg gccacttgag tctcttgtca 1680
ctgactgtgc ccaccttgg cccctgccag catcctccac acaccttgcc cacaggagga 1740
cagctggagc agggccacag gggagggcac gcaagggacc tatctgacaa ggccctgaaa 1800
cttccttccc actgaggacc ccaggacttg acctagtcat ccccaacttt gctgccaaata 1860
ctttgggagc aggcagatgt ccaggaagcg tctgttctc tgtaccctcc ctgccaaagga 1920
aggagcttga gaaaaatctc ttgaaggtag agcccctgt tctggcctag ctctcccgga 1980
ggcgcagggc tgacgagtgc cgccaaggta agaccagctc tggagtgtgg gatatacagg 2040
ccttcagtgg caacacctgc tcattaatca agcccttctc ttccggaacc tgccctggct 2100
tgggatggtg ggaaggaagg agaacagaat ctgttctcc cttcctggcc ctgcggtgag 2160
aggcgctgac tagtgtaggt ggggtggagac agggccatca gaaggcctga gtgaggcacc 2220
ctctgtacat gcagcacaag cgggtgtgga gtgtggggaa gcatctaaag atctagaaaa 2280
atttggcagc aaaggaattt taccacaca ctggagccct aggctttgtt tctaaaagtt 2340

tttattatttc tttaggaaaa cttgggaagc actagtttat gaaaattttt agaacttcat 2400
tgctacatgg cctttccaaa cacatcccca gatggtttct ttaaaacat gcagtgggac 2460
aaggttgata taaacagttg ttccagctga atccaactca ccaaaacggt gcaggtgagg 2520
caaattactt ttgagactgc aagtactgta tatgtccatt aacaaaaaca cagtaaaaga 2580
ctttaagaaa ttgtaaggac actggcttga ctgattcatg cggctgcaaa tccctgggag 2640
ccaagattca aaggcagaaa tgtctgtggt gacagcacca ccaactgcctt tgtccaaatt 2700
acagatctgt cacactcaga gcttgctgct agcatggggc tgccgtcggc agcaaaggga 2760
acttcatgga tctgtgagga ggaacagctg agttcctgac tgcctttaat tttctctgag 2820
gctttgctga gtcacctaatt ctcttggggc tgtggttttc tcacctgtag aaggaggggac 2880
agggtctgata tccctagagt gcctttcagc tctgggattc acgcattcta aggagggtgg 2940
ctagagcaca gaacctctaa agatgttcat tcattccttc acaaagttt acatgagcac 3000
ctgccatgtg ctaagcacca gggccgacca ctggcccaaa aacacaggca tctgctggcc 3060
tgcccactgc agcagcagcc atacctttgc aggccggtgg agccccctt tctacagcct 3120
gtggaaaaaa tggttctaaa tttgcagatc ctctcatcaa atcaggaagt caagaaacat 3180
gatagaatag aggaactggt ctcagtttgc acaggccatc agtttcacaa gacaggaatc 3240
gaatatcaac agtggctgat tatcacactc aggaattgaa aataattaga aaaagaggca 3300
aagatgctgt ggcaatcatt ggctgggtccc ctttgggtctc cagcacccat tcccctttgg 3360
tttagtaaca gcaccctaac tttcctccct atatcgtgtg ataacagaag cactctctcc 3420
aggataccct ccctgagaga caggcatatg acctgagcca gccaatcaga ctccttccct 3480
gcaaggatgc actaggtgga cagcatggtg ggagcatctc tcatccaggc aggggtgatc 3540
tgtgggactg cagtcagtcc tgttgcttag agaccccagg actgccatag cttctgtcct 3600
ggacttgatt ctccaggcta acagagaacc tgactgatgc agattcagga gagctggttt 3660
gtttagtctc cagttccttt catgaaatgg ctattatctc tgctagctac tatagcagaa 3720
atctggaaaa catgattttt cttgatttgt gaaattgttg atgtttcttc aggaatttcc 3780
gcctgcttct cataaactgg cagaaactta gaaatgttac atttcttaaa gagagtcatt 3840
gtaattatta tctgaataag atgatagtgt tttgaattta acgtaataaa ctctatctcc 3900
tg 3902

<210> 209

<211> 3539

<212> DNA

<213> Homo sapiens

<400> 209

tattgtcttt	gggtacatgt	gaaagatttc	cttacataat	ttatTTTTta	atgatgtatg	60
ttgtatttgg	atcagttaca	atattaaatt	gcccttaata	gattgagtat	gtatagatgc	120
cttagatggt	gtagttgtca	tgcataattga	acactggaag	acttaatttt	ctttttatag	180
actaaaattc	ccattgttta	gtaaggatca	tttacattta	aacagtaact	atttcgtgat	240
tttgtttggg	ttttttttga	tagagttttg	ctcttgttgc	ccaggctaga	gtgcaatggc	300
acgatctcgg	ctcactgcaa	cctctgcctc	cagggttcaa	gcagttctcc	tgcctcagcc	360
tcttgagtag	ctgggattac	gggcgcacatgc	caccacactg	agctaatttt	tgtatTTTTa	420
gtagagatgg	ggTTTTgcca	cgttggccag	gctggctctcg	aactcctgac	ctcaggtgat	480
cggcccacct	tgacctccca	aaatgctgga	attacaggcg	tgagccacca	cgcctggcca	540
ctatttcatg	tttacctgta	cttggttact	caaattgctg	gggcaaggta	ggggataatg	600
ttattgactg	gcagacaaaa	gggttgttgg	caaaggggga	gaaaaagtgc	agaaataggt	660
ttatTTgttt	accagtgagg	ttttagaAAC	agtcccaactt	tttaggcatg	gtacgtatgg	720
catgacagaa	aattgtagag	aggcagagtgc	catggtagat	tttaacttga	acatgtttta	780
agtatacata	atctTTtgct	gccatgttat	taaaacttaa	ttgaactact	tagaattggc	840
cgcaaaagaa	gatatactta	tttggaaaat	ggactttggc	tgatttgtta	ttgatttcat	900
tctatTTtga	tgtgaaaccg	ctttctatgt	ttagaacatc	gggtcagaag	ttgagatttc	960
cactatcgag	aaacaacgga	aggagctgca	gttgctcatt	ggagaattaa	aagatcgaga	1020
taaagagctc	aatgacatgg	ttgcagtgca	ccagcaacag	cttctttcat	gggaagagga	1080
tcggcagaaa	gtgttgacac	tggaagaacg	ttgcagcaaa	ttagaagggtg	aactacataa	1140
aagaactgaa	ataatcaggt	cactcacgaa	gaaggtaaaa	gctcttgaat	ccaatcaaat	1200
ggaatgccaa	acagctctcc	aaaagaccca	actacagctt	caggaaatgg	ctcaaaagta	1260
gagagagaaa	agaggaaaga	tgaattgctt	aatattgcga	agtcaaagca	agaacgcaca	1320
aattcagaac	tgcacaatct	gagacagatt	tatgtaaaac	aacagagtga	tctgcagttt	1380

cttaatttca atgtggaaaa ttctcaggaa ttaatacaga tgtatgactc aaagatggag 1440
gaatcaaagg ctctggactc cagcagagac atgtgtttat cagaccttga aaataaccac 1500
ccaaaagtcg atattaagag ggaaaaaaat cagaagtcac tgtttaagga ccagaaattt 1560
gaagccatgt tggttcagca aaataggtca gacaagagct cttgcgatga atgcaaagag 1620
aagaaacaac agatcgatac tgtgttttggg gagaaaagtg taattacgct gtcatccata 1680
ttcaccaaag acttagtaga gaaacacaac ctcccttggg ctctgggagg aaaaaccag 1740
attgaacccg aaaacaaaat tacattgtgc aagatccaca caaaatcacc aaaatgtcat 1800
ggcactgggg ttccagaacga aggaaaaaca ccctcagaaa caccacttt atctgatgag 1860
aagcagtggc atgatgtcag tgtttacctg ggccctgacca actgtccaag ttcaaaacat 1920
ccagaaaagc tggatgtaga atgtcaagat cagatggaaa ggtccgaaat ctcatgctgc 1980
cagaaaaatg aagcctgtct gggcgaaagt ggcatgtgtg actccaagtg ctgccacccg 2040
agtaacttca taattgaagc cccaggccac atgtctgacg tggagtggat gagtattttc 2100
aagccttcca aaatgcagag aattgtccgc ctcaaactg ggtgcacctg ttccagaaagc 2160
atctgtggca cacaacatga ctccccggca agtgagctaa ttgccatcca agattcccac 2220
tctttgggtt ctcaaaaatc tgccttgaga gaagatgaga cggagtcctc ttccaataaa 2280
aagaactcac ctacgagttt gttaatctac aaagatgcac cagcattcaa tgaaaaggct 2340
tcaattgtgt taccctccca ggatgatttc tcgcccacga gcaagctcca gcgtttgctg 2400
gcggaatctc gtcagatggg gacggacctg gagctgagca cactgctgcc catcagccat 2460
gagaatctca ctggcagtgc cacaataag tcagaggctc cagaagagtc agctcaaaaa 2520
aatacctttg tcagttattg aaggaaacaa aaggcaactt cagtattcat cgtgatcacg 2580
aatttctcat ctatgtggaa ggcagaaagc agacaccaat actgaatgaa tacttaaccg 2640
taaaaactgaa agaggattct agttcttcat aaacggcact taattccagc tgggagcaga 2700
actagaaagt taatttttaa acatctacac ttcatittca agttaacat ttttgtgctg 2760
aagaaatatt ttcatgtgta agaaagtaga ccttattgta catatagaaa gttggaatta 2820
tgctaagaat gaaaaagact tctctgtaaa gatacggact acagttaaag gctagagaag 2880
ctctttaaaa atgtgaatgt caaatagaga aagaaccct gcatagaaag tgctgtttta 2940
actatctgat ttttaaaaaa tctgtgcata catttaaat ctaaacaata gcttatcaga 3000
gtcagctcaa aatatatgag aaacagtatt ctctcatggg tttagctttt gactttgctg 3060
tgtaaataga cataaggtgc tttgatataa aatataaaat gtaactggaa aatagctcga 3120

ggtccttctg tcccaagctg agcagagccc catctttctg ggtctatatt agtcccacct 3180
actgacacaa acaaaagctt gctggaagat cgagtttttag acgcattttt aaaaatctta 3240
aagactaaaa cacttccatt ttaacttgta aagtaattta attttttaaa gattatacta 3300
tatgcctctg tgtcttctct aaaagaatag atcaacttca gtccataaaa gatattttta 3360
atattaaaga aaaaatatgt ttccttggtt tctttttatt ttacaggagt aaaataagga 3420
aggaacgttc atcactttaa actgaacctg gcaagttaat ttcctcggga atggggatgt 3480
atttttttaa gcattgcaga tatcaaagtt ctattgtgct gaataaatgc ccctttgtt 3539

<210> 210

<211> 3882

<212> DNA

<213> Homo sapiens

<400> 210

ggttttaaat tttttttttt gtagagaatg ggtgtcgtg tgttggtcag gctgatctaa 60
aactcctggg ctcaagtgac cctctggctt caaagcgtg tgattacagg tgtgagctga 120
ctgggcccgg cctcaaatgc ctttataatt taagaaatgg ctctgaaaaa aaaggaaata 180
cgtgatgtgg gccaaagcag cgaacgtgtg aggtgggcct gaggaaggt cggagctgga 240
gtccccaca gggacaggtg atgttgcttt gaagtgaatg agatgcgtct gaaaaaata 300
atctcagagt tgcctgggca ctagaagggg cttcccttgc cccctcgatt cctgcttcta 360
ctccccgggc tggccctgcc ctggaaacca cacgagggtg gccacgcat ccgtcagatg 420
tctggggacc atgtacctgc taaggaggagg gaggacgagg caggacatg gggatgtatc 480
agggtcagtc atcgtgccac aacccccagc cccagggaa cacgggatgg gcagcatttt 540
tactttaaaa tgttgctca tctagagggg tttccaccc tgttggtgct ggctttgggg 600
agatatgatt ttatttgatt tatgtattta ttatttgag atggaatttc gctctttttg 660
cccaggctgg agtgcagtgg cgcgatctcg gctcacggca gccaccatct cccgggttca 720
agtagttctc cggcctcagc ctcccagta gctgagattg caggcgttcg ccaccacgcc 780
cggctgattt tgtattgttg gtggagacgg ggtttcgcca tgttggccag gccggtctca 840

aacgcctgac ctcaggtgat ccacccgcct cggcctcccg aagtgctgga attacaggca 900
tgagccaccg tgcctgaccg agatgcaatt ttagagccca ggaggccagg ctgctatttc 960
ttccaggagt gatttcccaa aatggacctg gagctgacag gttcctgggg ggacttgtgg 1020
ggggaccttg tgcccactcg gtcgtgcac tactgtcccc acatccccat cgccagaagg 1080
ccagcaccca cttttctgcc acattttggg aaccataaaa ggaccagat tggagacttg 1140
ttgagggaca ggcctgtatg aactcaatct caccaccgat agccctgcca ccacgggagc 1200
ggtggtgacc atctcggcca gcctggtggc caaggacaac ggcagcctgg ccctgcccgc 1260
tgacgcccac ctctaccgt tccactggat ccacaccccg ctggtgctta ctggcaagat 1320
ggagaagggt ctcagctcca ccatccgtgt tgtcggccac gtgcccgggg aattcccgtt 1380
ctctgtctgg gtcactgccg ctgactgctg gatgtgccag cctgtggcca ggggctttgt 1440
ggtcctcccc atcacagagt tcctcgtggg ggaccttgtt gtcaccaga acatttcct 1500
accctggccc agctcctatc tactaagac cgtcctgaaa gtctccttc tcctccacga 1560
cccagcaac ttctcaaga ccgccttggt tctctacagc tgggacttcg gggacgggac 1620
ccagatggtg actgaagact ccgtggtcta ttataactat tccatcatcg ggaccttcac 1680
cgtgaagctc aaagtgggtg cggagtggga agagggtggag ccgcatgcca cgagggtgt 1740
gaagcagaag accggggact tctccgcctc gctgaagctg caggaaacc ttcgaggcat 1800
ccaagtgttg gggcccacc taattcagac cttccaaaag atgaccgtga ctttggaact 1860
cctggggagc cctcctctga ctgtgtgctg gcgtctcaag cctgagtgcc tcccgttga 1920
ggaaggggag tgccaccctg tgtccgtggc cagcacagcg tacaacctga cccacacctt 1980
cagggaccct ggggactact gcttcagcat ccgggccgag aatatcatca gcaagacaca 2040
tcagtaccac aagatccagg tgtggccctc cagaatccag ccggtgtct ttgctttccc 2100
atgtgtaca cttatcactg tgatgttggc cttcatcatg tacatgacc tgcggaatgc 2160
cactcagcaa aaggacatgg tggagaacc ggagccacc tctggggtca ggtgtgtctg 2220
ccagatgtgc tgtgggcctt tcttgctgga gactccatct gactacctgg aaattgttcg 2280
tgagaaccac gggctgtctc cgcccctcta taagtctgtc aaacttaca ccgtgtgagc 2340
actccccctc cccaccccat ctcagtgtta actgactgct gacttgagat ttccagcagg 2400
gtggtgtgca ccaactgacca ggaggggttc atttgcgtgg ggctgttggc ctggatcatc 2460
catccatctg tacagttcag ccaactgccac aagcccctcc ctctctgtca cccctgacc 2520
cagccattca cccatctgta cagtccagcc actgacataa gcccactcg gttaccacc 2580

ccttgacccc ctacctttga agaggcttcg tgcaggactt tgatgcttgg ggtgttccgt 2640
 gttgactccc aggtgggcct ggctgcccac tgccattcc tctcatattg gcacatctgc 2700
 tgtccattgg gggttctcag tttcctcccc cagacagccc tacctgtgcc agagagctag 2760
 aaagaaggtc ataaagggtt aaaaatccat aactaaagggt tgtacacata gatgggcaca 2820
 ctcacagaga gaagtgtgca tgtacacaca ccacacacac acacacacac acacacagag 2880
 aaatataaac acatgcgtca catgggcatt tcagatgac agctctgtat ctggttaagt 2940
 cggttgctgg gatgcaccct gcaactagagc tgaaaggaaa tttgacctcc aagcagccct 3000
 gacaggttct gggcccgggc cctccctttg tgctttgtct ctgcagttct tgcgcccttt 3060
 ataaggccat cctagtcctt gctggctggc agggggctgg atggggggca ggactaatac 3120
 tgagtgattg cagagtgttt tataaatatc accttatttt atcgaaacc atctgtgaaa 3180
 ctttactga ggaaaaggcc ttgcagcggc agaagagggt gagtcaaggc cgggcgcggc 3240
 ggctcacgcc tgtaatccca gcactttggg aggccgaggc gggatggatca cgagatcagg 3300
 agatcgagac caccctggct aacacggtga aaccccgctc ctactaaaaa aatacaaaaa 3360
 gttagccggg cgtggtggtg ggtgcctgta gtcccagcta ctgggaggc tgaggcagga 3420
 gaatggtgcg aaccgggag gcggagcttg cagttagccc agatggcgcc actgcactcc 3480
 agcctgagtg acagagcgag actctgtctc caaaaaaaaa aaagaagagg ttgagtcagc 3540
 agggacttgg gttccctgtg tgtgaggggg gcattcttgc ctgccagctg ctcccagagt 3600
 ggcttgaga aggaagaagc aggatgacag agcctgagca gcggaaccag cctgcaccct 3660
 cccttctggc ccagcgacct gggctgtggc tgagacaata atgaggccag aagtagccgg 3720
 agcctgtcag gaagggcagg ggaggactgt ggggtctggg ctctgtcgct gtaaccatct 3780
 gctcccaggc tgtgtgcaga aaatggcatt tacactattg tgcagctcat tctcatgaaa 3840
 tactgccatt gttgctaaat aaagcttgtg tgctctgaat at 3882

<210> 211

<211> 3891

<212> DNA

<213> Homo sapiens

<400> 211

ttatgagaga aaggcagagg gagatttgac acacacagga ggggccacgt ggagacagag	60
gtggagattg gagaaatgtg gccacaagcc agggaaacacc agcagccacc agaagccgga	120
agacgtgagg cagggttctt cccagagcct tcgctgctga gtctgggaat ttgttaccga	180
agccataaga agtgggtaca cgccctgagc ctcccacact tgctcacctg tcctgagatg	240
agaatctcta ctctgcagca tatttgagg atcactgcgg gggccacaga ggtgctgttc	300
agatggcact tcagaagact caggagaccc tggggcagga gcagtttgac tgacagccca	360
gagggtgcc ctctgattcc acctgaggcc ctgcttttcc tggctgcagg ggttccaggg	420
ccaggccatt tccgctggcg caggactctg ctagcagcaa cctgcctgaa gtcttccttt	480
ggcctggctg agagtttctg agacctgcgc tggagcggag gtgcttcctt ccttgcttcc	540
tttcttcctc tctcccttct ccatccagca ggctggacct gcctggcatc tgtgagctct	600
ccctactttc tctataccc taacctttgt cctgcatggg cgactcccc agtgagtctc	660
ttgcagcttt taccacagt cctgcttctt ggagaatcca aactgatcca gttagggatg	720
ataaagtgtg gggtaggtgc tcggtgactg ttttctctga ggttgtgact cgtgtgaggc	780
agaagcagtc cccgtgagcc ctcttggtat cttgtggagt ggagaacgct tggacctgga	840
gccaggaggc ccagacatac atcctgtccg agctgcagct tcctgtctct aaaatgagcc	900
ggccagcgca ggtggccaga catcactgtt attctccttt gagtctttaa atcttgttgt	960
ctttcttgca gactcggtga gctgtgaaag gctataatag gggctttatt ttacactttg	1020
atactatttt ttgaacattc atattattgt tagatatga tattcatatg aaggagcagg	1080
atgacttggg tccttcttgg cagtagcatt gccagctgat ggccttggac agttacctgc	1140
cctctctagg cctccctttc cttgtctatg aaatacatta tagaatagga tgtagtgtgt	1200
gaggattttt tggaggttaa acgagtgaat atatttaagg cgctttcacc agtggctggg	1260
atgtgctctg tagtttctgt gtgttaacta taaggttgac tttatgtca ttccctctc	1320
tcccacaaat gtcaccttgg aaagacggag gcagcctggt ggaggtgtat ctctagaca	1380
ccagcataca gactgaccac cgggaaatcg agggcagggt catggtcacc gacttcgaga	1440
atgtgcccga ggaggacggg acccgcttcc acagacaggc cagcaagtgt gacagtcatg	1500
gcaccacct ggcaggggtg gtcagcggcc gggatgccgg cgtggccaag ggtgccagca	1560
tgcgcagcct gcgcgtgctc aactgccaag ggaagggcac ggtagcggc accctcatag	1620
gcctggagtt tattcggaag agccagctgg tccagcctgt ggggccactg gtggtgctgc	1680

tgcccctggc ggggtgggtac agccgcgtcc tcaacgccgc ctgccagcgc ctggcgaggg 1740
ctgggggtcgt gctgggtcacc gctgccggca acttccggga cgatgcctgc ctctactccc 1800
cagcctcagc tcccagagggg aggacatcat tgggtgcctcc agcgactgca gcacctgctt 1860
tgtgtcacag agtgggacat cacaggctgc tgcccacgtg gctggcattg cagccatgat 1920
gctgtctgcc gagccggagc tcaccctggc cgagttgagg cagagactga tccacttctc 1980
tgccaaagat gtcataatg aggcttggtt ccctgaggac cagcgggtac tgacccccaa 2040
cctgggtggcc gccctgcccc ccagcaccca tggggcaggt tggcagctgt tttgcaggac 2100
tgtgtggtca gcacactcgg ggcctacacg gatggccaca gccatcgccc gctgcgcccc 2160
agatgaggag ctgctgagct gctccagttt ctccaggagt gggaagcggc ggggcgagcg 2220
catggaggct gcagctccca ctgggaggtg gaggacctg gcaccacaa gccgcctgtg 2280
ctgaggccac gaggtcagcc caaccagtgc gtgggccaca gggaggccag catccacgt 2340
tcctgtctgcc atgccccagg tctggaatgc aaagtcaagg agcatggaat cccggccct 2400
caggagcagg tgaccgtggc ctgcgaggag ggctggacct tgactggctg cagtgcctc 2460
cctgggacct cccacgtcct gggggcctac gccgtagaca acacgtgtgt agtcaggagc 2520
cgggacgtca gcactacagg cagcaccagc gaagaggccg tgacagccgt tgccatctgc 2580
tgccggagcc ggcacctggc gcaggcctcc caggagctcc agtgacagcc ccatcccagg 2640
atgggtgtct ggggagggtc aagggtctggg gctgagcttt aaaatggttc cgacttctcc 2700
ctctctcagc cctccatggc ctggcacgag gggatgggga tgcttcgcc tttccggggc 2760
tgctggcctg gcccttgagt ggggcagcct ccttgcctgg aactcactca ctctgggtgc 2820
ctcctccca ggtggaggtg ccaggaagct cctccctca ctgtggggca tttaccatt 2880
caaacaggtc gagctgtgct cgggtgtgc cagctgtcc caatgtgccg atgtccgtgg 2940
gcagaatgac ttttattgag ctcttgttcc gtgccaggca ttcaatctc aggtctccac 3000
caaggaggca ggattcttcc catggatagg ggagggggcg gtaggggctg cagggacaaa 3060
catcgttggg ggggtgagtgt gaaagggtgct gatggccctc atctccagct aactgtggag 3120
aagcccctgg gggctccctg attaattggag gcttagcttt ctggatggca tctagccaga 3180
ggctggagac aggtgtgccc ctgggtgtca caggctgtgc cttggtttcc tgagccacct 3240
ttactctgct ctatgccagg ctgtgctagc aacacccaaa ggtggcctgc ggggagccat 3300
cacctaggac tgactcggca gtgtgcagtgt gtgcatgcac tgtctcagcc aaccgctcc 3360
actaccggc aggggtacaca ttcgcacccc tacttcacag aggaagaaac ctggaaccag 3420

agggggcgtg cctgccaagc tcacacagca ggaactgagc cagaaacgca gattgggctg 3480
gctctgaagc caagcctctt cttacttcac ccggctgggc tcctcatttt tacgggtaac 3540
agtgaggctg ggaaggggaa cacagaccag gaagctcgtt gagtgatggc agaacgatgc 3600
ctgcaggcat ggaacttttt ccgttatcac ccaggcctga ttcactggcc tggcggagat 3660
gcttctaagg catggtcggg ggagagggcc aacaactgtc cctccttgag caccagcccc 3720
acccaagcaa gcagacattt atcttttggg tctgtcctct ctgttgccct tttacagcca 3780
acttttctag acctgttttg cttttgtaac ttgaagatat ttattctggg tttttagca 3840
tttttattaa tatggtgact ttttaaaata aaaacaaaca aacgttgtcc t 3891

<210> 212

<211> 3547

<212> DNA

<213> Homo sapiens

<400> 212

tatttaaatg tgtacatttc aaagtgtttc cacatatatt aacttcattg atcctccaga 60
caaccatgta gattggacac acccaggaaa gatgactaag gaaggctatt ctttttttat 120
tgagacaggg tcttgcctctg tcaccaggc tggagtacag tggcatgac acagctcatt 180
gcagcctcga cctccctggg ctcagatgat cttcctacct cagcctcctg agtagcttgg 240
attacaggaa tgtgccacta tgcctggcta attttttag agatgaggtt tcaccatgtt 300
gcccaggctg gtctctatct cctgagctca agtgatctgc ctgcctcggc ctcccagtgc 360
tgggtttgca ggcatgagcc actgtgccca gtcaggatgg ctattcttat gataaaggct 420
aagatattta ttcttctttc ccgctttgga attcatatac ctgagaactc tatgattcac 480
cctctcacta ctaatttttag aaaacaagct gtccttttcc attccctcaa aaacaatagg 540
agtccaagta ataaatgaac actaggaagt catagcatca tatgtaacat gtttagcatc 600
ctccctcctg acatggatgc tgttcacatg ttcactgata aggagcctga gattcagaga 660
ggttcagtgg tgtgttcaca tagctgagac tagaatccag gtctcctaac tctcagtctt 720
gccccctttc tgccaataca gtgtctctct tgtatttcta gatcaaggca aagaggacac 780

tttgatagtt ctccccacac ttgtgtgtcc atgatttgtgt gtgtgtgtgt gtgtgtgtgt 840
gtgtgtgtgt atgttgtggg tggataatat gtaaagca gaactgtgat gtactcaact 900
cagggtccag aggggtgctgc agtgtgggtgt ttctcaaagt gcatctatgg cttgtcaggt 960
tagggagaga aggcagcact cgggaccttg tccatttatt ctgaaaggaa tacatgtaaa 1020
atagtcceat aggggtgtca gaaagcttgg ccttaaggtc aaaagagcac accctgaata 1080
caggtttgcg cgtttgctgg tgtgtgagct aacaaatgcc actctcacac ggtttctttc 1140
agtcccaactg tggagcttcc ctgagggtgc cggggcaagt cttgccagca aggcagcaag 1200
acttctgct atccaagccc atggaggaaa gttactgtg aggaccacc caatggaagg 1260
attcttctca gccttgacct tggagcactg ggaacaactg gtctcctgtg atggctggga 1320
ctcctcgcgg gaggggactg cgctgctata gctcttgctg cctctcttga atagctctaa 1380
ctccaaacct ctgtccacac ctccagagca ccaagtccag atttgttgt aagcagctgg 1440
gtgcctgggg cctctcgtgc aactggatt ggtttctcag ttgctgggagc agcctgtact 1500
ctgcctgacg aggaacgctg gctccgaaga ggccctgtgt agaaggctgt cagctgctca 1560
gcctgctttg agcctcagtg agaagtcctt ccgacaggag ctgactcatg tcaggatggc 1620
aggcctggta tcttgctcgg gccctagctg ttggggttct catgggttgc actgaccata 1680
ctgcttacgt cttagccatt ccgtcctgct ccccagctca ctctctgaag cacacatcat 1740
tggttttctt attttctgt tcatTTTTTA attgagcaaa tgtctattga acacttaaaa 1800
ttaattagaa tgttgtaatg gacatattac tgagcctctc catttggaac ccagtggagt 1860
tgggatttct agaccctctt tctgtttgga tgggtgtatgt gtatatgcat ggggaaaggc 1920
acctggggcc tgggggaggc tataggatat aagcattagg gaccctgagg ctttaagtgg 1980
tttctatttc ttcttagtta ttatgtgcca cttcttagt tattatgtgc cacctccct 2040
atgagtgacg tgtttgatca ctgacagaat agcaagcaga gtatcattca tgctggggcc 2100
agaatgatgg ccggttgcca gatataactg ctttgagca aatctcttct gtttagagag 2160
atagaagtta tgacatatgt aatacacatc tgtgtacaca gaaaccggca cctgccagac 2220
agagctgggt ctaagattta atacagtgt ttttttctc ttgaaatat tttactttaa 2280
taccagtgcc ttttcttgtt gaacttcttg gaaaagccac caattctaga tcttgatttg 2340
aattaataca cacaatatct gagacactta cacttttcaa aagatttgtg tatgcattgc 2400
ctaattagag tagggggaga agggcaacta ttattatccc tattttacaa aactgaggct 2460
tagtgagggt cagccacatg cctagactta tatactagtt agtggtgcag ccaggagag 2520

gactcagatt tcctggaggc aaagtctatc tctgaaactc catgaagact tttgcagcca 2580
 gttccccacca atatgccccca gacgtgagac aaacaaggac ttttctttta tatagagcca 2640
 tccataaaat cctaagccct tttattaatg tataaccagg agaacatctg tgccaacggt 2700
 tggacttttt atggctgaga ttcgggagga agtgtgacac caagcaggag aggaagaatg 2760
 attttctttg tacttaggtt ttctaaggac attgttttaa tctgtatcgt gccaaagtgt 2820
 tatcactgtt aaacttctga agacataacc agttgagtct tatttcaaga tatgttctca 2880
 agccaattgt gtgcttctct tgtttctgtg attgctttct agccaaagcg aagcttgtac 2940
 aggttgagta tcccttatcc aaaatgcttg gaaccagaag tgtttcaa ttagattat 3000
 tttcagattt tggaatgttt gcatatacat aatgagatat tttgggaata ggacccgagc 3060
 ctaaacacaa aattcattga tgtgtcagtt acaccttacc cacatagcct gagggttaatt 3120
 ttatacgata ttttaaatag ttgtgtacat gaagcatggt ttgtggtaac ttatgtgagg 3180
 ggttttccca ttttttgtct tgttggtgct caaaaagtgt tggattttgg agcatttcgg 3240
 attttggatt tttggattag ggttgctcaa cccatattat tggctgtaca tcctggtcac 3300
 ttctgacttc tgtttttact aatggaagct ttgcaaattg aattctcagt gagttgtata 3360
 tttatacacc tggcttgaag ccttaattgt atataatgat gctttttaaa aaatgctatt 3420
 tggaagacta tttatttctc gtgtatataa tgtatataaa aaaatatggt tagtgtttac 3480
 ctaaggttaa ccaatttcaa gattaaaatt tttaaatagt aaaataataa aaaattataa 3540
 agttctt 3547

<210> 213

<211> 4270

<212> DNA

<213> Homo sapiens

<400> 213

attgctaaaa ggctgcaatc attaggagta tacagagact ggaaacagtg ctggcctaag 60
 tacaaaaatc tcaaataatga atatagaaca gttaaataatg cccataactc tggagacagc 120
 tctaaaacta tgaagttctt ccatgatttg gatgtaatcc tgcagtatga acctgccaca 180

caatttacag aggaagatgc aaatggcagg tacctggaaa cgctcagccc aagtacagcc 240
ccagagacca ctgaagaatt tttattggtg tgtgatacac ggaagaaggg aagaaaacga 300
aagtgccttt tccactgttg ggatcaacct catgcaagtg gtaaaatgtc aattgcatca 360
gtagataagg aagatgtctc aggaaatcct ttacttctgg tttctcatgt cagaccaatg 420
gaactaggta ctctacgtca gtattggaac cctctaataa tacaactttt aacccaactg 480
tagcaaatga aggaggaaag cactggactg tgccagaagt cagggctcta atagacatct 540
ggtctgataa aagcatacaa cgacaactag agggaaacagt gagaaataag aggatatttc 600
aacaattgc agccaagctt cagaaatttg gaatagacag agactggaaa cagtgcagaa 660
caaaatacaa aaacataaaa cacgaatata agatcgtaag aacagctcaa gatctaggca 720
tgactaagag tatgaaattt tttactgagt tggatgctat tctgggaccc aataaaacag 780
aaaaatcacg agaccaggaa tccaagatg gagaacatgt cacagaatgt gccaacgtaa 840
aaatgggaga ggaccagaca ggtaggaagg tgaagaaaaa taatcttaac atcatgttac 900
atcacacagg ttcaaggatc ctttttccaa aatgcctggg atcagaagtg tttcagattt 960
agatactttt tcagatttta gagtatttgc atatacatag tgaggtatct tagaaagggg 1020
agccaagtcc aaacatgaaa ttcatatgtg tttcatatat atagcttaaa gctaatttta 1080
tgcaatattc ttaataattt tgtgcatgaa acaaagtttt gactataccc atcacatgag 1140
gtcaagtgtg taattttcca catgtagcat catgttggtg ctcaaaaagt ttcaaatttt 1200
gtagcatttc agatttcata ttagggatgc tcaacctgta ttgagaatgt tcagtaccat 1260
aagaggaata ttatatatgt aagttaaata ggtttcatta catgctattt gacaagctag 1320
ctgaatttat tatgaaacag atttagtata catttgatct tccccagaat agaaacagta 1380
cagttataca aaaaggagga aataaaactg gattcccaga ataaagttaa aaatagatca 1440
attttaataa agcaaatatg caaccccaga tggcagaagt taaagtaa at tttcatacta 1500
attgtggtaa aattgagtaa aatagaaaaa gggcattgaa gaacttagaa aaatataaaa 1560
tacatgagac tttcttagaa gtagtacatt tctctgagac ccatcataaa tgtcttttaa 1620
gtatatttaa accaaaggat tgagatacag tacatacaca ctaagacatg atagcatgaa 1680
ataaactgaa tgagttctag accaggattc aggaaatcaa agttgtaagg ctctgtggaa 1740
gcttgaagta accaagtgtc ttctctagac caggggtccc caacacctgg acccttactg 1800
gtccgtggcc tgttacgaac tgggttgac agcaggaggt gagtgggtggg cgagccaagc 1860
ttcatctgta ttacagaca ctccccatca tgcacattat gacctgagct ccgcgactcc 1920

tgtcagatca acggcaacat tagattctca cattagatta gaacactgga gcacgaagac 1980
tgttgtgaac tgtgcaggca agggatctag gttgtgtgct cttatgaga atctaagcc 2040
tgatgatctg tcattgtctc ccatcactcc cagatgggac catgtagttg caggaaaaca 2100
agctccgggc tcccactgat tctagattat ggtgagttgt ttaattattt cattatatat 2160
tacaacgtaa taataacaga aataaagtgc acaataaatg taatgcactt gaatcctccc 2220
aaaaccatgg cccctcacc ccctgggtcca tggaaaaatt gtcttcctg aaaccagtcc 2280
ctgggtgcaa aaggttggag accgctgctg tagacctaac tccaaaattg gggggtgtgg 2340
acaagatggt cttaaagacc tctactaacc acagtgtctc cggattttat tatctggctt 2400
aatgatgag tcccaattgt aagacagtct gcgtctaggg aagagagggg aaccacagac 2460
agttaagact ggaaatgttg gtgagaaatc tcaaaatatt tcgctgggtg acaagaaaga 2520
aactggtatg ctagagaact atacatctcc cccagttaga tgactacaga taaagcagcc 2580
caacagcagt ggcatgatat cttcatacag tcattgctgg agatgcagct aaagatgatt 2640
ccattagtta tgtcagaaga cttagttaga gactcagata cataccaat atctatagt 2700
acaaaaagat gcttaagggt agggaaatcta actaatcata tttaatatta gggtccttt 2760
aaaaaggaaa atactgcatt agagttttaa acacaattct gggccaggcg ttgtggctca 2820
tgcctcta at cccagcactt tgggaagcca aggtgggtgg atcacttgag gcaggagttt 2880
gagaccagcc tggccaacat ggtgaaaccc catctctact aaaaaatata caaaaaatta 2940
gctaggtgtg gtggcacatg cctgtaatcc cagctactcg ggaggctgag gaatgagaat 3000
ccttgggaacc tgggaggcag aggttgcagt aagccaaaat cgtaccactg aaccacagcc 3060
tgagcaacag agtgagactc tgcctcaaaa acaataaat aatctaaata aataaacac 3120
gatcctgaag taaattttaa aagccaatat atatccctt atgttcatac agtcattgct 3180
ggagatgtag ctgaagatga ttcagtcagt aataagtcag aagacatagg agatacagat 3240
aaaaaacaag gtcttgacac acataaaata atattctggt ttttttttt tgtacgtgtg 3300
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg acaaagtata tacataaaat gctattataa 3360
gacactgcta tggcctgaac tgtgttcctc ccaccaatat tcatatattg aagccttaac 3420
ccccaatgtg atgtatttgg agacagggcc tttgaatgat aactagcttt agatgaggtc 3480
atgagagtgg tgcctcata atgggtttta gattttatat ctatatatta atagacgcta 3540
ccatacctaa gaaattatgt tataacatta tatgaagtac tgttgatca taactcaaaa 3600
cacataaatg aaaggtggaa ataattaatg gaagcaatgt tcccatcgc tgtttttctc 3660

caagtgtagc agcatcagca ttaactgaga acttactcaa aatgcaaatt cttgggcccc 3720
 atccagaatc agaaactctg gtgttggggc ctagcaatct gttttaacaa gtcttccagg 3780
 ttataatgat gcaagcaagt ttgagaatca ttaccctctg gtatagggca ctaagggttt 3840
 ggaggtgaga ttttgtgctt gctacctgat agtttgccctc ttctacacaa accaaaactg 3900
 gggaggagga gatcaccaag cccccaagct gaagtatatc tgtaaaaaag accttgtacc 3960
 tagtctgtca gtccaaagct tcatataact tcacaaagtg taaagctcaa tgtaattta 4020
 acaaactagt taatcaaatt tcctatactc ctggcaaact tatttctctg gtttatcaga 4080
 caggacagat tcttaggttt ccataggcat cacagctatg gcctttgtca ttaagagtta 4140
 aaaatcaa atgcccaggt gcagttggca catgcctata atcccagctt cttgggatgc 4200
 taagattgaa gcatgactta agcccaggag tttgaatcca gcctgggcaa cacagcaaga 4260
 accatctct 4270

<210> 214

<211> 3867

<212> DNA

<213> Homo sapiens

<400> 214

aatttgtact gctgcta atgacaccc agaaaccttg ttagacaaaa ggcagtttca 60
 agccaatgct atggtttcca tgtggacata cagtgcctat gtagcaggca ctagagtaa 120
 atggacttgc ctttaatttat aaaggaggga agaggtagaa gggaaccatg ggtcctcctg 180
 ctagaggggg agtttactaa aaggaggtcc ttggaaaggg gaatggagag aaggtgcctt 240
 tgactgtctt ctatccatta gttctgcctt ggagcacact ggggaagcag gctgcgggcc 300
 ttccaaaagt aaaaaatggt gatatgcaat cgaagcttat ccttagccta tgcacatttg 360
 tctcagctgg gcattgtctt ttcagagagc ttgtagcaca agggctacac atgggcgcca 420
 agatggtggt agatacact tgggtgcactt tttgttttac ttgtttctta agactatttc 480
 acaagtcctg tgaggcaaaa aaacaaaaca aaacaaaaca accaaacaaa tacaatctaa 540
 cttttaccca atctacagca ggaaatcaaa ggagtgggtg gaatgagaga aaatatgcaa 600

agagatcatt ttttaagtttg atttcctgtc tgtaattttc aaggactaat atagcaaatt 660
tttcttctgc cattatcatt tatgtctccc tatttaccac acaataatgt aaatgcagag 720
aatgaggagg catcttttaa aagccttagg atattctata tgatgacctc aatattgact 780
ttcagccata ctgggaaaac ttacttttca tggagtgcc actaacagtg aatgtattag 840
agtataaaat gtttgccatg tatacacctg tatgtgcaca tacacacatt acacacacac 900
acagaatgca catttcacac acatatactt attattcaag ttgaaactgc actctaataca 960
atctgagtct attgctgttt caactcttaa aatcaatata tcctacatta gtagatataa 1020
acataattca aatatTTTaa tatttaagag gagaaaagta actagaaaac caatgaaaag 1080
tgaggccatc agaaatagaa aatgcctggc acgaacagtc tatctaaatt ctcaatttca 1140
cttcaaatta gagaatccat aatggactag aatataaatt acaaacacat acacacatct 1200
tcacttaaag ttgttttaag ttctttgaag ttctgacatg tttttagcca gggttatttg 1260
ttcaggttct tccttgttag gattccagac tggaaaagtg gaagtctcag gaaatgcatg 1320
tttccatgag ttttttagtt tcacagtttt acagatccaa cgacacaatc ttttaatctt 1380
tggtcactca accaaacagg agttccgtag gcagagtgt cactttgaat tgctaataka 1440
aaataatgca cagtgtcctc aggatatgtt aaacaagggt ttttaagagca ttttatttta 1500
cagcacttta gtcttttcag ctagatttca gtgacactat ggtgtaaatg ctatatctgc 1560
cataacttat tgggtggctcc tgtgttacat acagttttta ataatgtctt aaattgtttg 1620
ttttcccaat gataatgata aagtgttctg tagaatttgt aaaacatgtc aattgaatct 1680
gttgaaaatt gtgtaattgt tatttcaatt gtgatactat tttgtaggta atagttttta 1740
acgtatattt gtatgagtca aaagtatgtg cttgtatgtg gtatgtgtgt gtaagtatat 1800
aatatcttat caaaaatcaa acttatccta aagaaaaagg gcacattgtg accagcctta 1860
atttattaac acttttttgt tgtttttgca atttggattt aaaattgaaa cagaaattaa 1920
gtttttgtta aaaatgggtgt cttttaattt tgtgaggaat gggctttaga acctatctga 1980
gttcccacaa gcaaactgtc caccttgtga ggtaccccat tgcttttcgt aataatcaaa 2040
catcaattca tatattaact tcattttcat acagactaat ttgttttcat caacaataka 2100
accgtacac ctttaaagtt gaccttccca acatggcacc catttttctt taatgataaa 2160
ttttccatga aaaattgttt ctccaaacca ttacttttta aaattcaatc ttcccaagta 2220
agatgaactg ccttggtgtt aggagagctt ttaaaggccc atccatacta ggtggttcca 2280
acatggttct cttctcgaga aaacaagcat gcaaccacac cacttttctg gtctgcccc 2340

cgtgtagaat tagtctagca atagaaaact catgactgac aaggatctac acatgtggtc 2400
atgcttgaag caaaaattct gtgaccttct ttgggcttgg atctgattac agaataattaa 2460
ttaactttct tatttccttt ctttctccat ccttagttat tccttttcaa tatttagagt 2520
tgccaggtaa aatacaggat atccagtga attcaaagt aactgggtat gtcctatata 2580
ttttttccta aatctcacia ttctatccac actgcctttc tatctttttc agctgggcta 2640
tctataaggg gcgagatcta cctccctcca tacccttgtg ttcagacacc ttatgaatat 2700
ctgcagtcac aatgtccttc aagaaagaaa acattgggtca gctctaggtc ctgcaaagtc 2760
tttttgaagg acgaactcaa atacagatgg gataatcaag taaatatctt cataggatca 2820
atgccaccat gttcaacact tccctttgcc agcctgttgt gaggtccaag tttccccatt 2880
aatcccttat atagcatttc ccagtaactg ggacaaccaa aaacacaccg acatattaga 2940
aatgctcctg aaaagtggca acaccgccta actcagtacc aggacctctt ttaaattcaa 3000
tttctttttt ctttcagaga gataacaaac gaattcatta tttccccat tcacatctta 3060
ccacaaatta tttttatcag gttaaaactg gtcactctacg gaattgtaga aaggtgacat 3120
aggaactgtc ttcactgctg gaagaataaa agagtctgag gtatagacac tgccctgggtg 3180
acaccttctc agaacattgt tgggggacag gggaggcagg cgcaagtagg ggatagaatc 3240
tgacctgac atgcagctat cacctggcag agagactcgt caaagcaaat tataacgacc 3300
agtactattt ttttttgaa ttgaaaaccc aagaagccct aaaataagaa cagtgagatc 3360
aaaggctggg ttctaaaaca atgcagaaaa tagaacatg ttggaattcc taaattctag 3420
ctttcaaata ctactgtttc caacagtga tccttgacag agactgaatg cagatggaat 3480
tttgaaacat tttcagtagc tacctcctct cctgaaattc ctataagtgg cagaggaaaa 3540
tccaaatcct ttaatataac atgtccatct catgactcct gcttacacac atttgtgttg 3600
atttgcttca tttctggagg atgggaattt gcagagctgg tgacatttcc ttcattagac 3660
accagaaatt caccagagag agacagatct gtgccttctc tttttaggat ctggttattg 3720
atactttaat aaatgtgggtg taaagaaaat ccatggctac agtctgtata gaaaatgtga 3780
atTTTTTaaa taagattgtg ttcttaatgt aaaaaataaa agtttatttg tattcagtga 3840
aatgcctaata aaagtcttgg taccaat 3867

<211> 3304

<212> DNA

<213> Homo sapiens

<400> 215

```
ttgtgagggtg taaataagat aattatcaat ccctcagtac aatctctggc atttagtaag 60
tgcttaataa attttagcta ttttatttgt attatcatta ttattcccta aggccagtct 120
cctataccat cttttctact tttccaggaa gcattcttct ccatctgtga gctcccctgg 180
atcctgttca tttgttttag gagggtagga aggttccttg agagagtcct agctattccc 240
tgttcagcag tgcagcccaa ggagtcctgg aaatgcagga gggaccttca ggtgcagggc 300
ttggcccaca cataggacta ccagggcata tgatatactt aggaagtaac aaggagccct 360
ggaggcaggc cagggtctgt gcaaagagac ctagatcatg tgggacacgc ctagtccttg 420
catctgtccc cctctccctg gagtttggac gggccctttc ttcagcaggt gtttgctcac 480
gtcccatgcc tgaggtgggg cccttggcca tagtcagtat tgggtggagt agcagcccgc 540
cctcagggaa ccataactca ggaactttac actgctgtgg tggagttcac acggggggct 600
gtgagagcca ctgtgcagtg ctggctcagg ggtctggaaa aggcttctgg gagggcatgg 660
gaacaaaact agatctgaat gatgaggcag agctagttag tcaggcgagg ggggtgcaga 720
gggatcacag tgcagaggcc aaggcagtga aaaaggtggc gtggatggtg acacatagga 780
gtcgagcata aaatgcgtgg caaggtcctc aggggtacgg cgggctgggg ctggaccaag 840
gagtgtagtg gagctctcta ctccaagggg gacattggaa tggttgaagt cacaccacga 900
gagatttgct ttgagaacat aaattcctct aggcgctggg agagtggaat agagatgagg 960
ggcctggagg cagaaaggct gtctggaaaa agttagtggg ggaattggtg gaagacatct 1020
gagagcctgg actcatggtg gtgaggagag atgccggaga tactaggaga gatgacagat 1080
ttgggtggtt gggaagactg cgaaggagtg gttgaaaatg gttccctggt atctggtgta 1140
gaaattcatc cgaatgggaa tggaggaata gagagggtga ggagtttagt tctggaatgt 1200
ggaatttgca gattcaggtt atcagagaaa gggggcaggc agggatgcct aggggacatt 1260
tatgtatttg gttctggaat tcaagggagg cgtaggctgg aggtacagat gagagatgcc 1320
agcctgtac ccaaccatgc ctcccttttt acagaatcac cgaagattca gctgtgacca 1380
cgtttgaggc tctgaaggct cgggtcagag aacttgaacg gcagctatct cgtggggacc 1440
```

gttacaaatg cctcatctgc atggactcgt actcgatgcc cctaactgcc atccagtgtt 1500
ggcacgtgca ctgcgaggag tgctggctgc ggaccctggg gaggtggcat gggggtcggg 1560
gaatgggagg ccgctccggg cactgcccag atgtctgtgc ttatgcctga gcctgcctgg 1620
gggaagtggg gagcatggcg caaaggagaa cagagccagg agccaggata tttaccgcga 1680
ggatatttac ccccaggctc gctgcctctc ctccccaact gcaggtttag gaacttctcc 1740
ccctccatga gttcactgca ttctcccttc cccgccccgg tccccgaagg cccactgcat 1800
cacacagact ggtgaggcct ggggtcagga ggaggctggc tgtaggtaaa caggaccagg 1860
gccttggccc ctccccctcc cattactaag ctctttctgc tcttgcctct gttcttctct 1920
caggagcagc cattaaaatg tcgcccggag acagtaataa aaggctcgga cgtgggctct 1980
gtgtcctgat caaaggccgc gtgtaatctc gttagggtctg cggctgccac agctggaccc 2040
agccttgctc tcattactgg ggctcctgct gcggggctgg ccaggcggtt tgatcctggc 2100
gtccccccaa cacaggagcg tgcctgcctg ctcacagaag ctgcctatgc gtccccagcc 2160
tgggctgaca ggaccaaggt ctcagcacac actggtgcag agagacatgg ctgcaggccc 2220
aggtgctcac atgcgcacac atggctcatt gtgtagacca gagccctccc tgttctccct 2280
gcagggtgcc aagaagctct gccctcagtg caacacgatc acagcgcccg gagacctgcg 2340
gaggatctac ttgtgagcta tctgccccag gcaggcctcg cctccagcag cccacctgc 2400
ccccagcctc tgtgacagtg accgtctccc tttgtacata cttgcacaca ggttccccat 2460
gtacatacat gcacatactc aaacatgcgt acacacacac acatttacac acgcaggact 2520
ctggagccag agtagaggct gtggcccagg cactacctgc tggctccac ctatggtttg 2580
ggggccatac ctgttccagc tctgttccca gggcggggca gggaggtggg ggttggggga 2640
gtagtggggc acggctccta agatccagcc ccatactga cagacggaca gacagacatg 2700
caaacaccag actgaagcac atgtaatata gaccgtgtat gtttacaatg ttgtgtataa 2760
atgggacaac tcctcgccct ctacctgtcc cctccccctt tggttgtatg attttcttct 2820
ttttaagaa cccctggaag cagtgcctcc ttcagggttg gctgggagct cggcccatcc 2880
acctcttggg gtatctgcct ctctctctcc tgtggtgtcc cttccctctc ccatgtgctc 2940
ggtgttcagt ggtgtatatt tcttctccca gacatggggc acacgcccc aaggacatga 3000
tcctctcctt agtcttagct catggggctc tttataagga gttggggggg agaggcagga 3060
aatgggaacc gagctgaagc agaggctgag atagggggct agaggacagt gctcctggcc 3120
accagcctc tgctgagaac cattcctggg attagagctg ctttcccag ggaaaaagtg 3180

tcgtctcccc gacctctccg tgggccctat ggtgtgatgc tgtgtctgta tattctatac 3240
aaaggtactt gtcctttccc ttgttaaact acatttgaca tggattaaac cagtataaac 3300
agtt 3304

<210> 216

<211> 3578

<212> DNA

<213> Homo sapiens

<400> 216

gcagacagac atcggcacgt atggacggcg cgagccgcta ctgcgttccg gaggagccat 60
ccggcgtcac aggctgtgct ggggaggtgg ggtgaccgtc ctcagaaacc cccgcgggcg 120
gggcgctgca cacacgtcca cctatagggg gtgtgtgctg gcgtgaggtg tgcagcccct 180
gtcaggatct ggcgagagaa gctgaccggg atggaggtca gaggatcgac aagaccatgc 240
tggcaagtct gaaggtcaag aagcaggagc tggccaacag ctcggatgcg accctcccag 300
accggccgct ctccctcct ctcacggcac ctcccacat gaagtcgtcg gatttctttg 360
agatgctgga gaaaatgcag gggatcaagc ttgaagagca gaagccggga cccagaaga 420
acaaggacga ctatatcca taccacagca tcgacgaggt tgtggagaag ggaggcccgt 480
accctcaggt catcctgcca cagtttgggg gctattggat cgaggacccg gagaacgtgg 540
gcacccaac atcgttgggg agcagcatct gtgaggagga ggaagaggac aacctcagcc 600
ccaacacatt tggctacaag ctcgagtgcg agggatgaag cagggcctac cggaggcact 660
tcctggggaa ggatcatcta aacttttact gtaccggcag cagcctgggg aacttgatcc 720
tgtccgtcaa gtgcgaggaa gcagagggga tcgagtacct ccgggtcatc ctcaggtcca 780
aactgaagac ggtacatgag cggatccctt tggctggact gagcaagctt cccagtgtcc 840
ctcagattgc aaaggctttc tgtgatgatg cagtgggact gagattcaat cctgtcctgt 900
acccaaggc ctcccaatg attgtgtcct atgatgagca tgaagtcaac aacacattca 960
aatcggagt catttatcaa aaagccaggc agaccctgga ggaggagcta ttggaaca 1020
atgaggagag cctagctttt aaggagttct tggacctgct gggggacacg atcacactgc 1080

aggatttcaa aggtttccga ggaggcctgg acgtgacca cggacagaca ggggtggaat 1140
cagtgtacac aacattccgg gacagggaga tcatgtttca cgtttccaca aagctgccat 1200
ttaccgacgg agacgccag cagctccaga gaaagagaca cattggaaat gacatcgtgg 1260
ccatcatctt ccaagaggaa aacacgccgt ttgtcccaga catgatagcc tccaatttct 1320
tacatgccta catcgtcgtg caggctgaga ccccaggcac agagaccca tcctacaagg 1380
tctctgtcac tgcgcgggaa gatgtgcca cctttgggtcc acctctgccc agtcccccg 1440
ttttccagaa gggcccggaa ttcaggagat tctgtctcac caagctcacc aatgccgaga 1500
acgcctgctg caagtcggac aagtttgcaa agctggagga ccggaccagg gctgccctcc 1560
tggacaacct tcacgatgag ctccacgccc acacacaggc catgctggga ctgggcccag 1620
aggaggacaa gtttgagaat ggaggccacg gggggttcct ggagtctttt aagagggcc 1680
tccgcgtacg cagccactcc atggagacca tgggtggcgagg ccagaagaag tcgcacagtg 1740
ggggcatccc tggcagctc agcgggggca tctcccacaa cagcatggag gtcaccaaga 1800
ccaccttctc gcctccagtg gtggcggcaa cggatgaagaa ccagtcacgg agtcccatca 1860
agcgacgctc ggggtctctc cccgcctgc acacgggctc agaaggccag ggcgacagcc 1920
gggcacgatg tgacagcaca tccagcacac ccaagacccc agatggtgga cactcctctc 1980
aggagataaa gtctgagacc tcatccaatc ccagctctcc ggaaatctgc cccaacaagg 2040
agaagccctt catgaagttg aaggaaaacg gccgtgccat ctcccgtcc tcctccagca 2100
ccagcagcgt cagcagcact gcaggggagg gcgaggccat ggaggagggc gacagtgggg 2160
gcagccagcc gtccacgacc tcacccttca agcaggaggt gtttgtctac agcccgtccc 2220
cgagcagcga gagccccagc ctgggggcag ctgccacccc gatcatcatg agccggagtc 2280
ccacagatgc caaaagcaga aactccccga gatcgaacct gaaattccgc tttgacaagc 2340
tcagccatgc cagctctggt gcgggtcact aatgtgaaag tggagtcctt cgcctgtcca 2400
agggaatccc ctcttctgtc ctggaaaagg ctctgtacc agcagtttgg gagtgccgtc 2460
cacgaccctg acagtcccag ccctgctgcc ccatggccac gtgcccacag atgtgctgtt 2520
ggtccaggtg tcccagtctg gccacagccc tgccctcgcc ctacacctaca tgccctccca 2580
gcccctccca tctctggacg aggcctcctt cctcaggttc ctctgtctc tgacctccca 2640
gtgtgatgtc cgggtccttt atcatcctat tcatcctgga gaggaagagt gtcgggcaaa 2700
gggggatctg gggggagctc agcagtgact ggggagctgg tctgcctcag agacagagta 2760
gggggtggga gcagagcctc ggtgagggtc ttggccacag ggcagtcct tcctgaacgt 2820

ggcaggcttt actaccagga acgcactcgg tgggtggaggc cccatgttcc caggagccaa 2880
 gattcgtagc atccttgagg ccatactgat aaaattcggc gctattgccc ccgtagctct 2940
 ggagctctaa accgtctatc tgcttctgtg ctgaacgcct ttcccatctg ctgacgtagg 3000
 cccagggctg ccctgccccct gctgccagtg taccgtgagc ggggctccag ccagttcaag 3060
 ctcagagcca gagctggacg ggccagaact gcgctgcaca cttcctggac tgaggcgggg 3120
 actttgggtc ccacccggtt tctcctgatt atggctgctg tggggtgagg ggaggagggg 3180
 gcagccccga ggcagtctct tccctttgag aagatatatt cctgctcctt agcatgcgtg 3240
 cagctctctc ctgttttggg tgttaccctt ggacactcca gctcggggac tgctggcgtg 3300
 tgagtgtgca gattcccctg tgtggctcgaa cctaagaact gtggcttgga agtgatgctc 3360
 catgtgacga cgactttgct ttctttctc ttagtgagga ggcgattcgt agatcccaac 3420
 tgcctatgta atgtaaataa tgtacattta atttattgct atggtagcac attgtatttg 3480
 ttaatgtaca aaacaaattc taaaagggtg acaaattgat attttgttgc ttaaattgtg 3540
 ctttgcagaa attgacaata aataacatat tttgtgtc 3578

<210> 217

<211> 4614

<212> DNA

<213> Homo sapiens

<400> 217

aataaatgca gaaagagaaa gtggttggag gatggagcac atggaattca ggagaaaacc 60
 caciaagacc cctgcatgtc agacacaccc tgtcccggag cgtggtgtcc ccttgagctt 120
 taatgagctc cctgtgatca cagccatgcc ttctcctcgt tggggagggtg tcctaggatg 180
 cttcagccaa agacctttgt ttcccgtgc tatctctttt acctggacaa ctctcctggc 240
 ccacgttctt cttgccagca ctgggggtca caggcctgag ccctgggtac aggggtgccc 300
 tagtcttctg ccctccccac ctcttaaggc acagagctgt tgggtgggct gcctggggct 360
 gccatccttc ccgtggaagc cagtagccac tctagtccat gggactcttg acaaaagcgc 420
 cccgagaggg caaacctgtg ccccatact cgcctgcatt cttcggactc cacatgcagc 480

agggctttgt gcctggggag ggggtggccag tctgtcctgg tcagtatgaa aagctgttgg 540
ccccctaggg acagagggcc cagctaaggc tgcctgagga tacaaactgc ttgctatccc 600
actcctgggg agcaggggtct gcagggactg agagtgggtc ccaccttgag aacgcatgca 660
aggtccgtcc tgtcttgatg tcttgatgtg actgtatgtg ccctgggggc tctgtgtgt 720
ttacaagtgg cttgtgaagc tcctgggagc aggtggtaca cccagtgtg aagacagggt 780
cgccgtggaa gagcgaagag cctgaccggg attcctgggt gggtgaaact aggaagtgt 840
cacaccagtc agagccaaat gaggggtgcg ctatggtcac tgctctgtcc agcatgcgtt 900
cctcctggga ggtcctggcc acctgtgcac ccacccctgt gccacctcca gcagtccac 960
ctggggccac ctacggtggc atggcccctg gctgagaggc cccgagggcg aagggttact 1020
ggaagccacg aaagtgcctc ttgggacagc cgaggccagg atgcagggca gcagcatcct 1080
gagcctcagc cccacgccgg tgccgggtaa gcagtgtgcc ctgtccccgt cgtatgacca 1140
ctctgatggg cctctctgtg ccttcgtgcg tctgccacgc ccagtgttg ccacatgtct 1200
gtcctctgtt ttctgccatc catgggtccc tccgcttcag cctggctgcg tctgcactc 1260
ccctcccgtc tgttgctgca gggcctctga agggagatgc atggccaagg tggcaacttg 1320
gaagtaggga ttggccccag ggcctccgcg caggccgctg tcctgctgga gctggctggg 1380
tgtgggggga acctgcctta atggtgtttc cctctgttct tgtcaacagg aggttcaaga 1440
tgtgagaggg tcagacgcct gaggaacct tacagtagga gcccagctct gaaaccagt 1500
ttagggaagg gcctgccaca gcctcccctg ccagggcagg gcccaggca ttgccaagg 1560
ctttgttttg cacactttgc catattttca ccatttgatt atgtagcaaa atacatgaca 1620
tttatttttc atttagtttg attattcagt gtcactggcg acacgtagca gcttagacta 1680
aggccattat tgtacttgcc ttattagagt gtctttccac ggagccactc ctctgactca 1740
gggtccttgg gttttgtatt ctctgagctg tgcagggtggg gagactgggc tgagggagcc 1800
tggcccatg gtcagcccta ggggtggagag ccaccaagag ggacgcctgg ggggtgccagg 1860
accagtcaac ctgggcaaag cctagtgaag gcttctctct gtgggatggg atggtggagg 1920
gccacatggg aggtcaccc ccttctccat ccacatggga gccagggtctg cctcttcttg 1980
gagggcagca gggctaccct gagctgaggc agcagtgtga ggccagggca gactgagacc 2040
cagccctcat cccgagcacc tccacatcct ccacgttctg ctcatcatc tctgtctcat 2100
ccatcatcat gtgtgtccac gactgtctcc atggccccgc aaaaggactc tcaggaccaa 2160
agctttcatg taaactgtgc accaagcagg aaatgaaaat gtcttgtgtt acctgaaaac 2220

actgtgcaca tctgtgtctt gtttgggaata ttgtccattg tccaatccta tgttttttgtt 2280
caaagccagc gtcctcctct gtgaccaatg tcttgatgca tgcactgttc cccctgtgca 2340
gccgctgagc gaggagatgc tccttggggc ctttgagtgc agtcctgatc agagccgtgg 2400
tcctttgggg tgaactacct tggttccccc actgatcaca aaaacatggt ggggtccatgg 2460
gcagagccca aggggaattcg gtgtgcacca ggggtgaccc cagaggattg ctgccccatc 2520
agtgtccct cacaatgtcag taccttcaaa ctagggccaa gccagcact gcttgaggaa 2580
aacaagcatt cacaacttgt ttttggtttt taaaaccag tccacaaaat aaccaatcct 2640
ggacatgaag attctttccc aattcacatc taacctcatc ttcttcacca tttggcaatg 2700
ccatcatctc ctgccttccct cctgggccct ctctgctctg cgtgtcacct gtgcttcggg 2760
cccttcccac aggacatttc tctaagagaa caatgtgcta tgtgaagagt aagtcaacct 2820
gcctgacatt tggagtgttc cccttccact gagggcagtc gatagagctg tattaagcca 2880
cttaaaatgt tcacttttga caaaggcaag cacttgtggg tttttgtttt gtttttcatt 2940
cagtcttacg aatacttttg ccctttgatt aaagactcca gttaaaaaa attttaatga 3000
agaaagtgga aaacaaggaa gtcaaagcaa ggaaactatg taacatgtag gaagtaggaa 3060
gtaaattata gtgatgtaat cttgaattgt aactgttctt gaatttaata atctgtaggg 3120
taattagtaa catgtgttaa gtattttcat aagtatttca aattggagct tcatggcaga 3180
aggcaaacc atcaacaaaa attgtccctt aaacaaaaat taaaatcctc aatccagcta 3240
tgttatattg aaaaaataga gcctgaggga tctttactag ttataaagat acagaactct 3300
ttcaaacct tttgaaatta acctctcact ataccagtat aattgagttt tcagtggggc 3360
agtcattatc caggtaatcc aagatatttt aaaatctgtc acgtagaact tggatgtacc 3420
tgccccaat ccatgaacca agaccattga attcttggtt gaggaacaa acatgaccct 3480
agatcttgac tacagtcagg aaaggaatca tttctatttc tcctccatgg gagaaaatag 3540
ataagagtag aaactgcagg gaaaattatt tgcataacaa ttctctact aacaatcagc 3600
tccttcctgg agactgcca gctaaagcaa tatgcattta aatacagtct tccatttgca 3660
agggaaaagt ctcttgtaat ccgaatctct ttttgcttcc gaactgctag tcaagtgcgt 3720
ccacgagctg ttactaggg atccctcatc tgtccctccg ggacctggtg ctgcctctac 3780
ctgacactcc cttgggctcc ctgtaacctc ttcagaggcc ctcgctgcca gctctgtatc 3840
aggaccaga ggaagggggc agaggctcgt tgactggctg tgtgttggga ttgagtctgt 3900
gccacgtgtt tgtgctgtgg tgtgtccccc tctgtccagg cactgagata ccagcgagga 3960

ggctccagag ggcactctgc ttgttattag agattacctc ctgagaaaaa agcttccgct 4020
tggagcagag gggctgaata gcagaagggt gcacctcccc caaccttaga tgttctaagt 4080
ctttccattg gatctcattg gacccttcca tgggtgtgatc gtctgactgg tgttatcacc 4140
gtgggctccc tgactgggag ttgatcgctt tttccagggtg ctacaccctt ttccagctgg 4200
atgagaatth gagtgctctg atccctctac agagcttccc tgactcattc tgaaggagcc 4260
ccattcctgg gaaatattcc ctagaaactt ccaaattccc taagcagacc actgataaaa 4320
ccatgtagaa aatttggtat tttgcaacct cgctggactc tcagtctctg agcagtgaat 4380
gattcagtgt taaatgtgat gaatactgta ttttgtattg tttcaattgc atctcccaga 4440
taatgtgaaa atgggtccagg agaaggccaa ttcctatacg cagcgtgctt taaaaataa 4500
ataagaaaca actctttgag aaacaacaat ttctactttg aagtcatacc aatgaaaaaa 4560
tgtatatgca cttataatth tcctaataaa gttctgtact caaatgtagc cacc 4614

<210> 218

<211> 1117

<212> DNA

<213> Homo sapiens

<400> 218

cagggtggtg atgagagctg gtgcggccac agcaaatgcg aaggcacctt tggggtggga 60
ggttgcagag tctcctgaag tgggagaagc tgaaagggcc agctcagtag ccctcacgat 120
ggactcccat cccagcagcc ctaccaagtg ctcatgcctc aagagtccaa gccacacgat 180
agaaggtccg tgcaaccctc cagaccagcc cagcctcccc aaggagcccg gggcagctta 240
gctctgcagc cccaggcccc acagccaatc cactagagcc tctctctcag ctctgccaag 300
gtccagggag gcctccctca tggcccatgg aagtactcag gccttctca gccctggag 360
cagccagcta ctcacctcca ctacctgcag aataaggggc cacagaagta ggcagcgaga 420
aggagtgacc aggggccaga tgggtccaagg aaggagggat tcaaggctgc atgccgggca 480
gagaaatagc aaaggagaa gaatagcaga ggcaggagga aaggctgcca gggccagagg 540
gacacagagc tactgtactc caaagaggca gcctgtgttg gagagggcag ccgccaagcc 600

aatttactgt tcattttatt actctgtgtt gccgggcctt aggccgggga agttatttca 660
ggcagagatc acagcacatt aactagttat taaaagaatg tccttttctg tgtgttcttc 720
ctcagacaag aaatagacgc tgtggcaagc acatattact gaaagtggat ggaccctcag 780
gggcaaaacg ccaagaactg ggggaataaa gaggcaaadc tttgtttctg aggaaaaggc 840
ccctcacagg ttcaggcctg gcatggagac aagaatcaag gcaagaagca ggcatgggag 900
aaggagagg aggaggcctt ctgagaccta ggcatggacg cacttatcca cccagagca 960
gccttactcg caatggggaa gggatgcagt gtcaactcac cctctcgga aacaactgca 1020
aaatatgact cttagtacaa aaacttttaa gttaaaaaat attttaaca aaactctgcc 1080
caacctttgg cctagcaatt ccacttctgg gaatctc 1117

<210> 219

<211> 3337

<212> DNA

<213> Homo sapiens

<400> 219

ctccccgtca cccccccagg gcctggcctc cctctccagc tgcaggcttt cacctcttgc 60
ctgggctgga ttccccagc cccagattcc caggatgccc aaccagggga atcccagtaa 120
ccatgcgcca gcctcctgcc tctcctgagt ggtggctgag gcctggagga ggagaggcca 180
cacagctggc agggctctggc ctgggcaaag aagagtagag ctcacgtctt cttggtgaaa 240
aggaggatct ctggaaagtc ctctctctg aaatgggttg ggatggggag cgacaacctc 300
ctcttccac agcaggatgg gagagcttac tcccaggccc ccacaccag gtcagacatc 360
acgtgcaccc tgaatgtagg caagggcctg gccctgcagc ccagggtcat ttctgtctt 420
ttccacttcc tctttccca ccgtcctgca ctagcaccag ggccaggcca aggcaagaat 480
cagacagcta ctccacagac agagaaacaa cttccagcta agtatgacat caggacttgt 540
ctttcctact aagcctccat cccgccccct cccctgaggc ccacgtctgc tgaattatcc 600
ggactccgca caagctgtgg ctctctctca gttaacaaa catttctga gcaccacta 660
ccagtaatcc agccggtagg cgacggagac tgccagcagg agggaggga gaaagccagt 720

catccggcag atctgggctg ttctgggcgg gagctgttct gggccacagg tgccctacag 780
ggctgggggc aggatggcgg taggagcccc aggggaccct cccacctctg cctggcagaa 840
gcaagtgcc ttctttcttg ttatgtgtgc cttctgctcc tgagccctag tgtggacctc 900
accgcatggt cccctctgcc cctccttct ggtcctgcc tggctgctgc tctctgctga 960
aggctgtggg gctctaggga gagtccagat caccctggga tttctccact gccaatgtg 1020
aagcctaaac tgtgggggtcc cagctcagcc ttctcactg gctctcaact ccaccccacc 1080
cctctattca ggaaggtgag gggcatctct ttagcagacc agactgtttt gagaagtgtc 1140
tctcatactt taactgaaga gtcattcaga ttctaattgt ctggggaggg cctgagagtt 1200
cgtctttttt tttttttttt ttttttagtt agggctctgc tgttatcacc taggctggag 1260
tgcatggca caatcatggc tcatgcagc ctgaaccct ccaggctcag gcgactctct 1320
cacatcaacc tcttgagtag ccgggactac aggtgtgcc ccacacctgg ctaatttttg 1380
tattttttgt aaaggcaggg ttccaccatg ttgccaggc tggctctcaa ctctgggct 1440
caagcaatct gctcgccttg gcctcctaaa ctgctgggat tacaggcatg agccaccaca 1500
cctggccgag aattcgtatt tctaagaggc ttcaggtgaa gccatgctg gttcctggac 1560
catggttttg agtagttaag ggtttggact agaatatatg aagggtggg ggtgaagaca 1620
gactctagac tctaaaggtt ggtggctggc tatgtagggg atgggggagt gctaccctg 1680
tcaggtggtg ggggcttctt ggctgcagag ttgggtggga gacttgggga agatgctttg 1740
gaaggcagt agtggttgggt gtcaacttct agtagtcag tgggagatct ggtcagggat 1800
gggatggagt gaagggggca gaggcatttg gtgtggggtt gatcagagga attttgaaa 1860
ggcttgaaa cattcctatg tatgtgagac acacctatgc cagggcaaag actccaagct 1920
caagtttttc tcttgcttct tagtcacaag aacatggctt tggagtgtga cactggccta 1980
ggaatccatg actcccaaag gacggggctg gggtagagga ggttcaggca aagcccttag 2040
attttgaga catcaggcag atgtctcaa aaatgattgt gatcaagaat ctgaattata 2100
agattcacag tctgctcccc aaccagtgct tgccaactgt acagctgctg ctccacgaag 2160
gggcatatgc caggctcgtc tgaccctgga atgaggatgt aggaagcagg cagagctccg 2220
gttcagccct cacaatggga ctgaagcagg agagaaggct gggcagaagg gctgtgggga 2280
agtagggctt gtctccatgg atgacgtcca gaaggatgtc aggaggagga atatcacagg 2340
agttatagac attggaggga acagagactg gcacaggacc tcttcattgc aggaagatgg 2400
tagttaggc aggtaacatt gagctctttt caaaaagga gagctcttct tcaagataag 2460

gaagtggtag ttatggtggt aacccccggc tatcagtccg gatggttgcc acccctcctg 2520
 ctgtaggatg gaagcagcca tggagtggga gggaggcgca ataagacacc cctccacaga 2580
 gcttggcatc atgggaagct ggttctacct cttcctggct cctttgttta aaggcctggc 2640
 tgggagcctt ccttttgggt gtctttctct tctccaacca acagaaaaga ctgctcttca 2700
 aaggtggagg gtcttcatga aacacagctg ccaggagccc aggcacaggg ctgggggcct 2760
 ggaaaaagga gggcacacag gaggagggag gagctggtag ggagatgctg gctttaccta 2820
 aggtctcgaa acaaggaggg cagaataggc agaggcctct ccgttcagg cccatttttg 2880
 acagatggcg ggacggaaat gcaatagacc agcctgcaag aaagacatgt gttttgatga 2940
 caggcagtgt ggccgggtgg aacaagcaca ggccttgga tccaatggac tgaatcagaa 3000
 ccctaggcct gccatctgtc agccgggtga cctgggtcaa ttttagcctc taaaagcctc 3060
 agtctcctta tctgcaaaat gaggcttgtg atacctgttt tgaagggttg ctgagaaaat 3120
 taaagataag ggtatccaaa atagtctacg gccataccac cctgaacgtg cctaattctg 3180
 taagctaagc agggtcaggc ctggttagta cctggatggg gagagtatgg aaaacatacc 3240
 tgcccgagc tggagttgga ctgtcttaac agtagcgtgg cacacagaag gcactcagta 3300
 aatacttggt gaataaatga agtagcgatt tgggtgtg 3337

<210> 220

<211> 1201

<212> DNA

<213> Homo sapiens

<400> 220

ctgtgcctct ccagggtgtg ttcttcatct gcaaaatggg gaggggtgtgg tggctcactg 60
 ggcagggagg acccgtgag tttcgaacag tctgtgtggc tcacacacag tgttgaggaa 120
 aaccagccca tccttattat cattcccagt ccaaagccc tttcctctc gacctgctcc 180
 caggccacc tcccggacag ccgctctggg ggaagatgag gacgggagga aagtgagagc 240
 aggactcagc acggggaaga gggagcagga cggggacttt ggcaggcagt ggggagagct 300
 tatgggcaga gtccaagcgc ctttcttgca gcctctggcc acctggagct cggatggtgg 360

ggctgtgctg agtctgactc cagaaaccct catcccagct gtgctcaggg gggtagataa 420
 caagtccac tttccctctc cagttctctt ctgggaggtg ggtaccccag gcttcggggg 480
 atgacgccc ggggtgaggg ttgctcaggg gcaggctgag gaggatcaca attgggaaag 540
 aatcctagca gacccccagg cagaagagtc aggaaggagt agaccctggt gttttgaact 600
 cagcacttgt ccgggcagtg tgggaaaggg gggcccggcg cggggaggcg ccctgggaat 660
 gticcaagg gctccaccgg tgctgctggg gttcccaggc atacgttttg gtgggaaaag 720
 ggtcggggaa ggcagtgact aggtctctgt gcctttgttt taggctggaa gctaaatcca 780
 gtggtcggcg cagtctacgg gcctgaattc tatgcagtga cggggttccc ctaccccacc 840
 accggcacag ccgttgccca ccggggcgca catcttcggg gccggggccg ggccgtgtat 900
 aatacatttc gggctgcgcc acccccaccc cccatcccga cttacggagc ggctgtgtat 960
 caggatggat tttatgggtg tgagatttat ggaggctacg cagcctacag atacgctcag 1020
 cccgctgcag cggcgggcagc ctacagcgac agttacggca gagtctacgc agctgccgac 1080
 ccgtaccatc acaccatcgg gcccgcggcg acctacagca ttggaacat gtgaaacctt 1140
 ccaccgtttc cttctcggac catgaagggc aaaaacaaaa aaacaaaaaa aatcacaaaa 1200
 c 1201

<210> 221

<211> 883

<212> DNA

<213> Homo sapiens

<400> 221

agtagaagca cctgcgtggt gtgcgggggt ggagcggggg ctggaggag agttaatgat 60
 ttgccacagg ctcatctgc aacttaacca agggtcagct tcccgtgacc atgtaccagc 120
 tgcgtcctct gggccacgct ccacttgccc gcttcacccc ggaaagcccc ccaggctgag 180
 tgcggcatga tctccatcac cgaatggcag aagattggtg tggggatcac cggtttcggc 240
 atcttcttca tcctcttttg aacactcctg tactttgatt ccgtgctcct ggcctttgga 300
 aacctgctgt tcctgacggg cctgtccctc atcattggcc tgaggaagac cttttggttc 360

ttcttccaac ggcacaaact caagggaacc agcttcctcc tgggggggtgt ggttatcgtg 420
 ctcttacgct ggccctcct cggcatgttc ctggaaacct acggattctt cagcctcttt 480
 aagggtcttt tccctgtcgc cttcggcttc ctgggcaatg tctgcaacat ccccttcctg 540
 ggtgcgctgt tccggagact tcaaggcact agctcgatgg tctgaaaaac agagatgagc 600
 tccttgaact tggatcattg gttgaggggg ctagaggag aatgggaacc acccctcag 660
 tcccctgcac tgactcactc cccgacatat ccggacctcc ccaagtccag aaggaaggaa 720
 tggagctgag caactgacgt caaatcccca agtcgactca agaggctgcc aggaagcaga 780
 gatgcagacc ccaaggagac tgggctgggg ctggtatcac accctcactc tatatttatg 840
 ggaggaaaag tgaagattaa attcccaagt tgtcgtgtg tct 883

<210> 222

<211> 1019

<212> DNA

<213> Homo sapiens

<400> 222

agatttggag gttcaacttc aacatggccg aagcaagtag cgccaatcta ggcagcggct 60
 gtgaggaaaa aaggcatgag gggtcgtctt cggaatctgt gccaccggc actaccattt 120
 cgagggtgaa gctcctcgac accatggtgg acacttttct tcagaagctg gtcgccgccg 180
 gcagctacca gagattcact gactgctata agtgcttcta ccagttgcag cctgcgatga 240
 cacagcgaat ctatgacaag tttatagctc agttgcagac atctatccgg gaggaaatct 300
 ctgacatcaa agaggagggg aacctagaag ctgtcttgaa tgccttgat aaaattgtgg 360
 aagaaggcaa agtccgcaaa gagccagcct gcaacgggac accctgcggc gccatgtgca 420
 gaaacaggag gccgagaacc agcagctggc agatgccgtc ctggcagggc ggaggcaggt 480
 ggaggagctg cagctacagg tccaggccca gcagcaggcc tggcaggctc tacacagaga 540
 acagagggag ctggttgctg tgctgaggga gcctgagtga ggagaccgcc agccccagaa 600
 gcagagggca gtcaaggta agagcctgtg gtccagcatg cctggcctgg gcgggctacc 660
 tctgagaacg gctgaaatgg tgcccagtc atcagcagt atggaatttg ctggaggact 720

aggccagagc aagcctcact gccactgtgc ctttggggca cccttgggggt tggacataca 780
 ccccttttag attcctctgt ttcttctacc tggataattc ttggccatgt tctctcttct 840
 ctaggttcag gtcagctctg cccctccgcc cccctcctgc tggttcccca gcccttttcc 900
 ctggccctgg cttggagaat ctgttttcaa tctccactga ttgccccctt gctggccagc 960
 ccaggggcct ttaccatgtt ctctccacat ccgtaaataa acttccttca ctacactgt 1019

<210> 223

<211> 2708

<212> DNA

<213> Homo sapiens

<400> 223

aagccttccc ggcttccagc ccagacacca gccagccagt ggcgttctg gtcctcggg 60
 attttccttt tcctccgaag ctgctgattc atccccaggc tggagtcagg ctcagctgtg 120
 gggctgggag catgggctct caggctgctg ctgagtggag gaactgggcc tcctgggagg 180
 tgtcctccag cctctctgga tgcctcatgg ggtgcttcaa ggatgaccgc atcgtcttct 240
 ggacttggat gttctccacc tacttcatgg agaaatgggc tccccggcag gacgacatgc 300
 ttttctatgt gcgccggaag ctggcgtact ccggcagcga aagcggtgca gacgggagga 360
 aggcagctga gcctgaggtg gaggtggagg tgtaccggcg ggactccaag aagctgccag 420
 gcctgggaga ccctgacatc gactgggagg agagcgtctg cctgaatctc atcctgcaga 480
 agctggacta catggtgacc tgtgcggtgt gcacacgtgc tgacggcggg gacattcaca 540
 tccataagaa gaaatctcag caagtgttcg cgtccccag taaacacccc atggacagca 600
 aggggggagga gtccaagatc agctacccca acatcttctt catgattgac agcttcgagg 660
 aggtgttcag cgacatgacc gtaggggaag gagagatggc ctgtgtggag ctggtggcta 720
 gtgacaaaac caacacgttc caggggggtca tctttcaggg ctccatccgc tacgaggcgc 780
 tcaagaaggt gtatgacaac cgggtgagcg tggccgcccg catggcacag aagatgtcgt 840
 ttggcttcta caagtacagc aacatggagt ttgtgcgcat gaagggcccc cagggaagg 900
 gccacgccga gatggcggtc agccgagtgt ctacaggtga cacatcccc tgtgggactg 960

aagaggactc cagcccagct tcgcccattgc acgagcgggt gacctccttc agcacacccc 1020
ccaccccaga acggaacaac cggcctgcct tcttctcccc atccctcaag aggaaggtgc 1080
cccggaaccg gatcgctgag atgaagaagt cgcactcggc caacgacagc gaggagtctt 1140
tccgggagga cgacggtgga gccgatctgc acaatgcaac caacctgcgg tctcggtccc 1200
tgtcgggcac aggacggtcc ctggtcgggt cctggctgaa gctgaacaga gcagatggaa 1260
acttccttct ctatgcacac ttaacctacg tcacgttgcc gctgcatcgg attttaacag 1320
acatcctgga agttcggcag aagcccatcc tgatgaccta gccgcgtgcg gaggcctgcgc 1380
agagccccgg cggggcccag cctcggagt gctgccaagt gcctacctgt ccaccgccac 1440
cggggtctgc gatggcacgc cagtgcctgga gccgcagcca ggcgaggcca ctcgactccc 1500
ggggccgggg ccgactccac gaacaccagc ccaaactgaa gtgcctcttc cctcccctgc 1560
tggcgtctgt ccgccctgtg cccccgccc atcgcccccc acccatctct ggagagccct 1620
ctgcacccaa agaggactag agatgccgag cggccatgag agagagcgga aggagcagct 1680
gatgcccaga gcggggccag agcggcgggt ctatgttcac gtccccccag cagcaggcgg 1740
aaccaccag ccagggcact cagtgcattg gactgtccac atgttcttga ggaaagccgg 1800
tggaagattc tggaatgccg tgcggatgaa cttcagcgcc cgagtcagtc ccagctcatc 1860
ctccccagtt taccactttg ttctaatagg agatgggaac acgagaagtt tgatggcttt 1920
gccctgggct gggaatacct caccacgcc cagttccaga aaggcctcca gctgagcaga 1980
cggccccgat ccgcccagaa cggccttttg cttccagcca aagaacaccg ccaacacgca 2040
cacctccaac ctgggacatc ccacgctggg cctcgcacgg aggaacctgc agaatttgga 2100
ttctgagggt agtcgggagg cctcggtagc caggcagaac aggatatctg ccaaagggtg 2160
tctgatgtgg ggtggggctg gcatectccc aggaagggtc taggtgggac cccgtcttct 2220
gggggcgggg gtgtcttttc atcttccttg gtttcctaga actcacttcc tttgacggcg 2280
tgtgttggtc ccactctca gaccagctca ctgaggcaga ggagttgctc agaggctcac 2340
atgggcaccc ccattgggtc gtgtgagcag ctgccagcc ccaggcctgc cctcggcctg 2400
gtccagcatg aaggcgtttc catctgcaag gatgcacggt accctccccg agagcaggcc 2460
tgtcccctac ccaactggga ataaactgga agctgggtct ctttgttgct atgttttttt 2520
gtttgaagtt ccaggaata tttgaggggt tccggtgatg tgtttaggga tcttctctgt 2580
gggggaaaag gaagaggagg gtcttgttct cccatctgtt tattctttgg gctctgggaa 2640
caggggacta ctttggggct ttctccagac ttttgtatgt tgttattaaa agcgagctat 2700

tgcatttc

2708

<210> 224

<211> 2884

<212> DNA

<213> Homo sapiens

<400> 224

ctgactttcc agagcccagc acagtacctg ggatatctga ggcacctagt aaacaattat	60
tgatcaaagg aagccaacat aggttgatga agaaggtaat tgcgaatgaa tgaatttcta	120
tgtggtcata ctgagaatat tagtgagtgg atttttacag aaatttgtgg tgcatgaatt	180
gctgaatatt tggttttctca tacagatgtg tgagatgcca gtaaacacac cagaaagtcc	240
ctggaagggtg agtcctgaag aggaacaaaa acgtaaagac ttgaggaaaa gccatctcgt	300
attcagcatt gaccccaaag gttgtgaaga tgtggatgac acactctcag tcagaacctt	360
aaataatggc aacctggaac ttgggggtcca catcgcagat gtaacacact ttgtggcacc	420
aaattcttac attgatattg aagctagaac aaggtaatgc tatttgaaat cagctctatg	480
gttgtgtgta tgtgactgga tattttgtgt ctgtactagt ttcagggtgtt caaagatctc	540
atgtttgtgc aattttgaag gtcccttcca gaaaaaaaaa gttgagggtcc actctccatt	600
ttcctttaga aaaacagtac cttgatcaat ttacctttgc tttttaacat aaccttttca	660
cacattgttt cctactaaat cgaaatgggt taaattttca tgtagtaata tactattttt	720
taaaaatact ggatcattac actccagttt ttcttatacg acaaagattc atgtcacttg	780
ctctttcttt ctcttatcag tggaagaata ttcagcccaa agcagtggtca cttagaaaag	840
tgggaccatg ggaatagttt tattaccag tctgctgcac tttatgaaac agcaacagcc	900
ttgggggaatc tgtagtgaga ttttggccat ttacctcct gcggcccaca cagtcagcag	960
ttctgtctct ccctgctaaa ggctgcgttg ccgcgtgtgt gtcattcaca gggccaccac	1020
ttattatcta gcagatcgtc gctatgacat gctgccttcc gtcctcagtg cagatttgtg	1080
ttcccttctg ggaggcgttg atagggtgagt ttatggcttt tgtcttcaaa gcttgtcctg	1140
gcccttctgt ggctcctgat gctgcctgct tctggcctca tgtttcttct ctgctatgcc	1200

ccaccccagc cctgtgtctc cctcttgacc tctcaacctc acccccgacc ccaaccccac 1260
accacttatac tttaggcagc tttattttctc tagccttccc tgccctttcc ctcctctctt 1320
ctgtctgcta gcagtggggc tctgcgtctc cctctgttgc tggcttttta aagtcagcta 1380
aaatctgaga acaaagtat gtagctttgt gcttatgcat tccctggcgg aagttgtttg 1440
gcatgaggat catgaactcg gggagttttt tgtttgttca tttgttgagt ttaaaccttg 1500
tttctctttg aatagctaata agaatacatat agggcccgaac tcatatgtcc caagaggatat 1560
ttaatgaaag gttcctccct atcactttcc ctcacttacc agttccgtat tagtttttct 1620
agatataata catacatgaa tatgcatatg tgatcttttt tacacaaatg gttgcatttt 1680
atatatataat actgttttagc accttccttt taaaaaagaa cttaatggta tcttgagat 1740
cattccgtat taataacagt tgcactatct atggaaatgt ggatagtttc caatcttttg 1800
gtattacaaa caaagctgta ctgagttaac tttgaacata agtcatttca cattttcatt 1860
tttattttta ttttttgaga cggagtttca catgttgccc aggctgggtc tgaactcctg 1920
tgctcaagtg atccttccgc cttggccacc caaaaagctg ggcttacacc tgtaatcgca 1980
gcactttggg caggagaatt gctcaagtcc aggagattga ggcagcagtg agcagtgatc 2040
atgccattgc actccagcct ggggtgacaga gcaagatcct gtctcaaaaa aacaaaaaac 2100
aaaaaaagcc agatgaattt gaatagtgat gttgtcaatg ttactgtttt tgtaggtatg 2160
ctgtaagcat catgtgggaa ctggataaag cctcttatga aattaagaaa gtgtggtatg 2220
gcagaacat tattcgatca gcatacaaac tgttctatga agcagcccaa gaactactgg 2280
atggaaactt aagcgttggt gatgatattc cagaattcaa agacttgaat gagaagagca 2340
gacaagccaa gctggaggag ttggtgtggg caattggaaa gctgaccgac atagctcgcc 2400
atgtcagagc taaacgagac ggatgtggtg ccctggaact ggaaggggta gaggtttgcg 2460
tacagctaga tgacaaaaag aacattcacg acctcatccc caagcagccc ctggaagtcc 2520
acgagacagt ggctgaatgc atgatcctgg ccaaccactg ggtcgccaaa aagatctggg 2580
agagcttccc tcatcaggcc ttgctgcgcc agcacctcc tccacaccag gagttctttt 2640
cagaactccg ggaatgtgct aaagccaaag gcttcttcat agatacacgg tattcctctt 2700
ttgagggggc agaggaatgg agtggcatgc tgtatattta gttatcttac agttgttctt 2760
aaaatgtgac agccagatct ttgacaaaa agagaaaaca gattcttggc tctcctcatt 2820
tttgaagaca catttttccc tcttcattgt tatgtataga gacttaaac aagtttattt 2880
aggc 2884

<210> 225

<211> 1513

<212> DNA

<213> Homo sapiens

<400> 225

ttgcataagt aatgaggagc tgaatggaaa ccaccaagac aatggggaat atgtctccag	60
gacatttcag agaccttcag atagcccctc tcataacagg cttgggggtc taggagggaa	120
aaatggtttc ctgggccagg gacaggccca gggccctgct gctctttgca gcttcgggac	180
attgtgccct gtaccccagc cactccacct cttggccatg actaaaagg gccaaggtat	240
agcttgggct gttgcttcag aggggtgaag cccaagcct tgggtggcttt catatggtgt	300
tgtgcctgtg ggtgtgcaga agacaagagt tgagctttgg gaacctctgc ctcaatttca	360
gaggatgtat ggaaacacct ggatgtccag gcagaagtct gctgcatggg aggagcctac	420
atgtagaacc tctactatgg caaggcatag gggaaatgtg gggttggagt cccacacag	480
agtccccact ggggcactac ctagtggagc tgtgaaaaga ggaccactgt cctccagacc	540
cttgaaatgc agatccactg acagcttgca ttgtgcacct ggaaatgcag gcaactcaagg	600
ccagcccatg aaagcagctg caggggctgc accctgcagg gccacaggag tggagctgcc	660
caactccttg aaagaccacc ctttccttgt atcatcatgc cttggatgtg agacatggag	720
tcaagggaga tcatttcaga gctttaatat ttaatgactg cccactggg ttttggactt	780
gcatggggcc tatggcccct tttattggct tatttctccc atttgtaatg ggagaactta	840
cctaattctt gtacttttat tgtatcttgg aagtaactta cttgcttttg attttatgtg	900
ctcataggtg gaaagggact tgccttgtct caggcgagac tttggactta tacttttggg	960
ttaacgctgg aatgagttaa gactttgggg gactgttggg aagcatgatt gtattctgaa	1020
atgtgagaaa ggcatgagat ttgggaggaa ccagagatgg aatgatatg gtttggctct	1080
gtgtccccac ctaaagtca tctctaattg taatcctcat gtgttgaggg aaggctctgg	1140
tgggtggtga ttagatcata ggggcggttt cccctatgct gttctcatga taatgagtga	1200
gttctcaaga tctgatggtt taaaagtgtt tggcagatcc ccaccaccac caccacctct	1260

tctgctgcct tgtaaagaag gtacttgctt gccttttacc ttccaccatg attgtaagtt 1320
tcctgaggcc tccccagcct tttttcttta taaattaccc agtctcaagt agctctttat 1380
agcagtgtga aaatggacaa atacaaaatt cattaaaata cctccaaatt taatatggaa 1440
ttatgtttac atttaagtta tcaatatcaa aagctctatc agttgtcaat aaatataact 1500
gggaatgtcc tag 1513

<210> 226

<211> 1919

<212> DNA

<213> Homo sapiens

<400> 226

cttgagtga ttccttttatg ccacgtacca gctttcacac ttccagagca tatctgtttt 60
aggcaacctg gaggccagga tgggtggatac tgttttgtat gacaacactc agctacagct 120
aaaggcagag tcaccatggg aggctttgga ctggggacag aagctttggg aagtagtgca 180
tgctgctgtg cccggttaca tggggcgga gaacgagctg acaatctcac cagggttgg 240
ccatcatgat gactatacac agaatcatag tttccagaag aaaaccagtg ggctgctgcc 300
accgtccctt gtcctggaca gctccaaaca gtacaaaac atcctcaa at cagggtactt 360
ctacaggctg actgtccaaa acaactggaa ggcatttaca tttgtgctga gcagggttta 420
ccttatggct tttcagcctg gcaagctaga cgaggatcca ctgttgagct acaacgtgga 480
cgtgtgtctg gctgtccaga tggacaacct ggatggctgc gactcttgct ttcaagtc at 540
tttccccag gatgtcctt gcctccgagc tgagaccga cagagggtc aggaatggat 600
ggaggctctg aagatagctg ccaatgtggc gaggagtta gagcaaaacc tgcaagtcac 660
actgaggaac aaaccaagg atcaa atggg tgggcatgaa ctcaggaaga acaaacgcca 720
atctgtgact accagcttcc tgagcatttt gacgactttg tctttggaac gaggactcac 780
tgctcagagt ttcaa atgtg caggctgcca gcgatccata ggtctttcca atgggaaagc 840
caaggtgtgc aactacagtg ggtggtatta ctgcagtagc tgccacgtgg atgacagctt 900
tctcattcca gcacgcatag tccacaactg ggatacttca aagtataagg tgtcgaagca 960

ggccaaggag tttctggagt acgtgtacga agagccgctc atcgacatcc agcaggagaa 1020
 cgccatgctg taccaccacg cagagccgct ggccgccgtg ctgcggctgc ggcagcggct 1080
 gaagtcgctc cgagcctatt tgttcagctg ccgggcagcg gtggcagagg atctccgccg 1140
 cagaattttc cccagagaat acctccttca acagatccac ctgtattcac ttgccgacct 1200
 gcagcaggta atagaggga agctggctcc attcttgggc aaggtcatta aatttgccac 1260
 ctcacacgtg tacagctgca gtctttgtag ccagaagggg ttcattctgtg aaatctgtaa 1320
 caatggagag atcctctacc cttttgagga tatttcaaca agcagattcg gagaccata 1380
 tgcagattta ttacaaggat atgtggcctg atgtgagat ggagtttcac tcttgttggc 1440
 cgggctgggg tgcaatggcg cgacctggc tcaactgcaac ctctgcctcc tgggttcggg 1500
 cgattctcct gtctcggcct ccggtgtatc tgggattgca ggcaccacc accatgcccc 1560
 actagttttt tttgtgtttt tagtggagac tgggtttcat catgttggcc aggctggtgt 1620
 caaactccta acctcaggtg atcctcccc gcctcggcct cccagagtgc tgggattaca 1680
 ggcgtagacc actgcacca gcctcaaaca caaattaaat acatacctct ctttaaccta 1740
 aatagaaaaa ccgtaaagcc cagattgcaa gatTTTTaaa tacaataaga atatcctgaa 1800
 ttataaaaact gctttgctaa agcctaatec aggatttatc ctcctagagg actacaagga 1860
 aagcacagcc ttgggagaga taaacatttt gacaaaacaa tgataaaatt ccacatcct 1919

<210> 227

<211> 1672

<212> DNA

<213> Homo sapiens

<400> 227

atccgaggcc gcgcgcgccg cgggcctggg gaatggagcg acgccggggg catcgagacc 60
 tagctcagct cagctccgct cccagacctt ctccgcggca gcctcttcag cctgctggcc 120
 gcaagtgcgc cctctaaagg ccccaaatgc cctgtacaca ccaggtgaag agcgcggaag 180
 cgcctgcaga gcagaattaa agaaaaatct tggaaaatgt ataccagtca tgaagatatt 240
 gggtatgatt ttgaagatgg ccccaaagac aaaaagacac tgaagcccca cccaaacatt 300

gatggcggat gggcttggat gatggtgctc tcctctttct ttgtgcacat cctcatcatg 360
ggctcccaga tggccctggg tgcctcaac gtggaatggc tggaagaatt ccaccagagc 420
cgcggcctga ccgcctgggt cagctccctc agcatgggca tcaccttgat agtgggacct 480
ttcatcggct tgttcattaa cacctgtggg tgccgccaga ctgcgatcat tggagggctc 540
gtcaactccc tgggctgggt gttgagtgcc tatgctgcaa acgtgcatta tctcttcatt 600
acttttggag tcgcagctgg cctgggcagc gggatggcct acctgccagc ggtgggtcatg 660
gtgggcaggt atttcagaa gagacgcgc ctcgcccagg gcctcagcac cacggggacc 720
ggattcggta cgttcctaata gactgtgctg ctgaagtacc tgtgcgcaga gtacggctgg 780
aggaatgcc a tgttgatcca aggtgccgtt tcctaaacc tgtgtgtttg tggggcgctc 840
atgaggcccc tctctcctgg taaaaaccca aacgacccag gagagaaaga tgtgcgtggc 900
ctgccagcgc actccacaga atctgtgaag tcaactggac agcagggaag aacagaagag 960
aaggatggtg ggctcgggaa cgaggagacc ctctgcgacc tgcaagcca ggagtgcacc 1020
gatcaggccg ggcacaggaa gaacatgtgt gccctccgga ttctgaagac tgtcagctgg 1080
ctcaccatga gagtcaggaa gggcttcgag gactggtatt cgggctactt tgggacagcc 1140
tctctattta caaatcgaat gtttgtagcc tttattttct gggctttgtt tgcatacagc 1200
agctttgtca tccccttcat tcacctcca gaaatcgtca atttgtataa cttatcggag 1260
caaacgacg ttttccctct gacgtcaatt atagcaatag ttcacatctt tggaaaagtg 1320
atcctgggcg tcatagccga ctgccttgc attagtgtt ggaatgtctt cctgttggcc 1380
aacttcaccc ttgtcctcag tatttttatt ctgccgttga tgcacacgta cgctggcctg 1440
gcggtcatct gtgcgtgat agggttttcc agtggttatt tctccctaata gcccgtagtg 1500
actgaagact tggttggcat tgaacacctg gccaatgcct acggcatcat catctgtgct 1560
aatggcatct ctgcattgct gggaccacct ttgacaggta aactctctga ggttttaaga 1620
gctcagagt catgtacata tgggtgcgtta tgttataaag tcccagataa ag 1672

<210> 228

<211> 1711

<212> DNA

<213> Homo sapiens

<400> 228

atctgcccgg ggccgctaag ggagcgcaag gtcaagttcg ccttggcccc gcctccagct 60
caggtagctag gggatctaga cctgaggctg cccgggccgg aggcagcctt gaggccccgag 120
accaaacgtc gtttcctctt cggacctcgg gcgccgggcc gcgcgctgac cgacagcccc 180
tgctaggccc agcagggtccc ctagtcccc gcagtcccc gagactcgcc gagcgccgtt 240
gctgagccct gcaaatagca gctacctgct tcagcctaga tcctgccatg aagcggactg 300
ctgctccctg gctcccactc tgatctgctt ttactcttg ccttgtctcc caattaataa 360
gcagggtggc cactgcaaca ggtgtggatg tgctgacaa gatgaagagc cgaataacctg 420
tggtgtcctt ggctgtggc tcctttaacc ccatacacia catgcacctg cgcatgtttg 480
aggtggccag agataccta cacaaacag ctgtgcctga gctgaagctt ctctgtgggg 540
cagacgtctt gaagacctt cagaccccc accctctggaa ggatgcgcac atccaggaaa 600
tagtggagaa gtttggcttg gtgtgcgtgg gccgagtagg tcacgacca aaaggttaca 660
tcgcagaatc tccatccta cggatgcacc agcacaacat tcacctggcc aaggagcctg 720
tgcagaatga gatcagtgcc acatacatca ggcgagcctt gggccaaggg cagagcgtaa 780
agtacctgat tccgatgct gtcatacgt acatcaagga ccatggcctc tacaccaagg 840
gcagtacctg gaaaggcaaa agcacccaga gcactgaggg caagacaagc tagggagggg 900
ggactcagca cccacacctc ctccaacaag ctctgctgg ggagagggtt gttaaggttt 960
ctgttttact ttggtttttg cttctccatt ttctatttc tttatttcta cagtgtattt 1020
acttctgaag agtcttctgt cccaggaaga gataccttct ttacaggaga ggaaaggtct 1080
aaatcacaag gatagacatt tatcaaagaa gttaaaatgg tgtggcaggt cattaggatt 1140
aggcagaatc tctcagagct gctggacaag gaggtctact tattttgtgt ggatggtaat 1200
tatggcatgc acgtgaatg cagttctgag catggcagcg gccctgagg gtcagatcag 1260
aattgcccac aatgtgtttt ttaactagga ccagggtcag catgctagtc ttgattggaa 1320
agatttgaca ggatgctaata tactgaacag tgggttttgt caacgccctg gtttcagaat 1380
atgaactgag gaggtaacaa gttggaaaca gcacattgct gatttacact ggatcttgcc 1440
ttagaaacca ttgtctgcct gcctaaccag cctttcataa aatttaaca aaactctttc 1500
tacgtagtga tcctcaagca atatttttga tacagcaagt gtcaaacttg ctatagcata 1560
aaagccgggg ctctgattt ccaggtttct aaaaaggaac tgaggtaaaa cagatgcctg 1620

accgttttaa aggatctttt ttaatgtttt atgactgcct gtctgtttga atactggcaa 1680
agggataaat aataaattga catcaaaaag t 1711

<210> 229

<211> 1840

<212> DNA

<213> Homo sapiens

<400> 229

ttgttgga agatgaagat tcccttcata gtgtccagtt gcacaaatgg gtaactatca 60
ggaatatctg aagacattgg cttctccact gcgagagatt gatccagacc aacccaaaag 120
actgcatact tttggcaatc cgtttaaaaca agataagaag ggaatgatga ttgatgaagc 180
agatgagttt gtagcagggc caaaaaaca agtgaaacgt ccaggggaac ccaacagtcc 240
tatgtcatct aagagaaggc ggagtatgtc cctgctgttg aggaaaccac aaacaccacc 300
tactgtaact aaccatgtgg gcggaaaggg accaccctca gcctcgtggt tcccatctta 360
tccaaacctc ataaaacca cccttgtaca tacagatgct actatcattc acgatggcca 420
tgaggagaag atggaaaatg gtcagatcac acctgatggc ttctgtcaa aatctgctcc 480
atcagagctt ataaatatga caggagatct tatgccaccc aaccaagtgg attctctgtc 540
tgacgacttc acaagtctca gcaaagatgg gctgattcaa aaacctggta gtaacgcatt 600
tgtaggagga gccaaaaact gcagtctctc cgtagatgac caaaaagacc cagtagcatc 660
tactttggga gctatgccaa atacattaca aatcactcct gctatggcac aaggaatcaa 720
tgctgatata aaacatcaat taatgaagga agttcgaaag tttggtcgaa aatatgaaag 780
aattttcatt ttgcttgaag aagtgcagg acctctggag atgaagaaac agtttgttga 840
atttaccatc aaggaagccg caaggtttta aagacgagtc ctaattcagt accttgagaa 900
ggtactagaa aaaataaatt cccaccacct tcacaacaac attagtcaca tcaacagcag 960
atcatcatgt tagtgcaaag accagtgaga aaaaaatgac aagttttctg tgctgtagga 1020
tggaacagga tattgttgaa gcctcctgga atgtttgagt caaggggatt gctttccaga 1080
tgctaagaag cagcagtggg gcttttgaat tttatgatta tctggcagtg aaagctgggc 1140

ttttgcctta ataatttttt aaagtatgaa ttgttttgtt ttgttttcct caattgagga 1200
 agctgatggtt attaattcac aggctaaatt cggtaaacac cactgcccct accacgggta 1260
 atgagaggtc actcacttga actttgccat tccaggcatt ctcagagtgg cgagggggcca 1320
 cctgcaagtg gagcacaact tgggtgctctt actgtgtcct tcagaaagaa taggtgtaca 1380
 gaaaggaaat ggcaatctta tgtgtgtctga acaaagtttt caacaattcc tagttgtgcc 1440
 ttttaaacca tgcaatattc aggatagttt gaatcaaaga agtaagaagc tgctatttgg 1500
 gtaacttatt tctctgtggg aaggggcagg gagagtcacc aaacaatcta cctccaactc 1560
 tcttctcttt tgtctagaga cattacaaag tgcacttgag gctgccccca acctctgaca 1620
 tttgttcttg catgtgatga tagaaagtct tcagatggac ttatacattc tgtgctttgg 1680
 aagcacaaga agaacaaaat atgtgtatat ttcctttaat gtttatacaa aagtttatat 1740
 ggagcagtat tgttatgttt gtatgaattt gcaaaaatta aagtgtacaa agagattttg 1800
 attttgcata tataaaataa atcattttat tgattttcac 1840

<210> 230

<211> 2448

<212> DNA

<213> Homo sapiens

<400> 230

ttgcctacac ttaaactcaa cttatgtgta ttgtaaatct ctaagacaat attagtctta 60
 ccaaacttac ctgaccattt tgttttattt ttatttttag ccaagaatat catggaacta 120
 atgatacaag aaaaatcctt tggtaactcc ctgctcctga attctgccat gcagccagat 180
 ctgacagtga gccggacata cagcggaccc atctgtctgc aggaccctct ggacaaggag 240
 ctcatgacag agtcctcact cttcaaccct ttgtcggaca tcaaagtga agtccagagc 300
 tcgttcatgg tttccctggg agtgtctgag agagctgagt accacggcaa gaatcattcc 360
 aggacttttc cccatggaaa caaccacagc tttagtacaa tgcattcccag aaataaaatg 420
 ccctacatcc aaaatctgtc atcactcccc acaaggacag aactgaggac aactgggtgtc 480
 tttggccatt taggggggcg cttagtaatg ccaaataaag ggggtgagctt actcatacca 540

cacggtgcc tcccagagga gaattcttgg gagatttata tgtccatcaa ccaaggtgaa 600
cccagcctcc agtcagatgg ctctgaggtg ctccctgagtc ctgaagtcac ctgtggctct 660
ccagacatga tcgtcaccac tccctttgca ttgaccatcc cgcactgtgc agatgtcagt 720
tctgagcatt ggaatatcca tttaaagaag aggacacagc agggcaaagt ggaggaagtg 780
atgtcagtgg aagatgaatc tacatcctgt tactgccttt tggaccctt tgcgtgtcat 840
gtgctcctgg acagctttgg gacctatgcg ctccactggag agccaatcac agactgtgcc 900
gtgaagcaac tgaaggtggc ggtttttggc tgcattgtcct gtaactccct ggattacaac 960
ttgagagttt actgtgtgga caataccct tgtgcatttc aggaagtggg ttcagatgaa 1020
aggcatcaag gtggacagct cctggaagaa ccaaaattgc tgcatttcaa aggaataacc 1080
tttagtcttc agatttctgt ccttgatatt ccccatctcc tctggagaat taaaccattc 1140
actgcctgcc aggaagtccc gttctccgc gtgtggtgca gtaaccggca gccctgcac 1200
tgtgccttct cctggagcg ttatacgccc actaccaccc agctgtcctg caaaatctgc 1260
attcggcagc tcaaaggcca tgaacagatc ctccaagtgc agacatcaat cctagagagt 1320
gaacgagaaa ccatcacttt ctctgcacaa gaggacagca ctttcctgc acagactggc 1380
cccaaagcct tcaaaattcc ctactccatc agacagcggg tttgtgtac atttgatacc 1440
cccaatgcc aaggcaagga ctggcagatg ttagcacaga aaaacagcat caacaggaat 1500
ttatcttatt tcgctacaca aagtagccca tctgtgtca ttttgaaact gtgggaagct 1560
cgtcatcagc atgatggtga tcttgactcc ctggcctgtg cccttgaaga gattgggagg 1620
acacacacga aactctcaaa catttcagaa tcccagcttg atgaagccga cttcaactac 1680
agcaggcaaa atggactcta gtccacttcc tcccatgaga cagagtgatg gccagcttgg 1740
ggacatttgc tttaaattgg aaagaggccg ctttctgccc agtggcgttg ggggaattca 1800
gccttcattt ataatcagt agattcccct gttgaagaaa ctaaatttta tataggtaaa 1860
acatgttaat aggaagagt acaagctctc ttacatataa gagggctcta ctatctcctt 1920
ggaatccaca tttgggttaa ctctcagat ttggagtggc aaggataaaa gtgagggcag 1980
aagtagctgt gggaaaagat gagctatgat aatgctggga aggcagagat tgattaagtg 2040
catgcttga aataggtttt taatgatgtg ccccaaaggg ccagctgatt ctggtactag 2100
attgtcagag ttttctacca actggcatct gtgatgtcag agatcattgt aaaaatggct 2160
tttagacgtg aaacagggtt gccaacccat ttgtatgact tcaacaacgt caaggagggc 2220
atttagaatt tagaatctga gcacatcaca ccagcaccag ctccctgtct cttctagcca 2280

cttaatggag acacaatgga gaggtaagac agaccacaaa ctagttctta tagtgactc 2340
caccttttac ttttttctg agacaaatct acccttattc tttcttctc ttccttacc 2400
cttgtagtag ggaggtatca aggagcataa ttaaacttgt caatacgg 2448

<210> 231

<211> 2672

<212> DNA

<213> Homo sapiens

<400> 231

aggacccgat ggggtgcccgg acgcggaaga actggcccag cggaggttcc cgcttctgaa 60
gcgtgggagg cggaagagac tgcagcccc gccccgtcc ccaagcctcc gccccttagc 120
ccccgcccc agctgccagt cccagcagc tcagtcctgc agtgagagtc ttgggagtc 180
atagctaagc accaggagct gagcactgcc cgctgtgcct gcctgcaagt ctgacatggc 240
tcaggagaaa atggagctgg accttagacc tgacacatct tatgggggaa ccctgaggag 300
atccagcagc gtcctccctaa tccatgggct cagtgaacct tcacaggttt tccaacctta 360
cacacttaga actcggagga atagtacaac aattatgagc cgtcacagcc tgttgctgtc 420
atcctcacct aatcgtattc ctagtagcag actgcatcag atcaaaaggg aagaaggcct 480
ggatatggtg aacagagaaa ctgcacatga aagggaatg caaacggcaa tgcagataag 540
ccaatcatgg gatgagagct tgagcctgag tgacagtgat ttgacaagc cggagaaatt 600
atattctcct aagagaattg acttactcc agtttctcca gcaccttcac ccaccagggg 660
attcggaaaag atgttcgtga gcagcagtgg attgccacca agtccagttc ccagtccaag 720
acgattttca aggagaagtc agagtccagt caagtgcatt agaccagtg ttcttggtcc 780
tcttaaaaga aaagggtgaaa tggagacaga aagtcagccc aagagactct tccaaggcac 840
taccaatatg ttatctccag atgccgcgca actgtctgat ctcaattcat ggtggtgtta 900
tcaaggagaa gaaattcctg ccttgaccag atgtgtggag catctacaaa tgaatgaata 960
gttatttaca cacaaaccac tgtgtacaaa agcgtccatg gagctgtcag tgtctcgagt 1020
ggtattatga ggcctcaggt gccttggggg acattgtcat gctataaggg atgtatatca 1080

taaggtatgg tggaagaggg gccttatgtg aatgattgcc acatactgtt tctgttgctg 1140
ctttttttcc gattcctttt tgtcattgga tttgtttgtt ttgtcatgtg gtgaatgggtg 1200
ttttagttat tgtgttgctg ccagaatcag aatccagttc ttgttcttac tgccttatag 1260
ttattgtgtt gccaccagaa tcagaatcca gttcttggtc atactgcctt gtagtgaggg 1320
cagtttaata tctacaaaga agctttttaga agctgaaaaa gtcaatgtga ttgtgcattc 1380
tgcttttaag aagctgtttc agctatgaac tgtgtatgtg ctataagtgt gaggtacat 1440
aagttattta atttttaaaa gaggaactc ctgagtgagc tgtttaagaa atctgagtgt 1500
gatctattgt tacgttattt ataactaggt aaaatgtctg tcgtgataga tttcttttaa 1560
cgttcagata ctgtggttgg gttgtctata tttaatatgc agatttgcct gctggaatca 1620
taatccattt ttaagtgaat gtaagaaatg aaaactactg catttgtgtc ttttgaaggc 1680
aaggatcctt ggattttaaa ggaagagtat gtgctttgaa ggcactcaga gactagtaat 1740
agcatatggg ttgaaggga acccattctc tttcaattac aagagagcat cacttagcgt 1800
gcagtacttc tgttacagca tccgatgtgt cctttatttt aaattgtaac cataacagcc 1860
attaatggct ttatttcttg tattgctctc atctgggaaa agtctctact tcttcaaacg 1920
taacataaat ctattatgaa gcttgtcccc tagtatgcca ttataaagaa aaaattcttc 1980
gatggtatgc agtgtatcta ttctgtttgt aaaagatcat gtcaaaatgt tctgcctcta 2040
taatgataat agatgggttt gtctttcagg atatttatcc acctactgtc ttctttgcct 2100
taaagggaca ctggccatc attttttaggc tcgaacttaa cactgttaag aaataactga 2160
aatatgatgg tatttgcatt aatttttgaa attcaatggg gggatagaat taggtcagga 2220
aatggaagtt gttccaatgg tgtgagaact aggagacaag atgattcact ttattattta 2280
aaccaagctt catttttagt ttttgttggt taaatggact ggaaagttaa gtttttgcag 2340
ggattgtttt gaaataaaga gatatgctaa ctcacagatg aactttgtta agacccttt 2400
atttttatat aaagtcta atttgaaaag cgattgttat aaagtaaaat tctctcttcc 2460
tattctaata tatatcatat atttcaggct tctatttgaa aacaggtata agagatgata 2520
tgatacaacc ctatagataa tgttttttgc ttgattgact tatataatca ctgtttcatg 2580
attactgctt ttggaataat aggaagtttt gtgaaatgct ggccttgtgt atatcttaga 2640
atgcaaattt aataaagtgt gtatacatgc at 2672

<210> 232

<211> 2245

<212> DNA

<213> Homo sapiens

<400> 232

```
acattgactg taaaggaacc aatgtgaaga gtggtgtttc ctgagcaaac ggtgacttaa 60
aaaaaaaaa aaaaaagtgg tggggtggag gtcagcagtg ccacagaaca aactggagtt 120
aagaaatgtc gttcttcaga tttaaaaaga aaacctttac tgaatcagct gagtgttaat 180
aatacgaatt tccttttctt gccaatcttg atctgaacag aaaatccaag aacagggata 240
tgtgtggatt acagttttct ctgccttgcc tacgactggt tctggttggt acctgttata 300
ttttattatt actccacaaa gaaatacttg gatgttcgtc tgtttgtcag ctctgcactg 360
ggagacaaat taactgccgt aacttaggcc tttcgagtat tcctaagaat tttcctgaaa 420
gtacagtttt tctgtatctg actgggaata atatatctta tataaatgaa agtgaattaa 480
caggacttca ttctcttgta gcattgtatt tggataattc taacattctg tatgtatata 540
caaaagcctt tgttcaattg aggcatctat attttctatt tctaaataat aatttcatca 600
aacgcttaga tcctggaata ttttaaggac ttttaaactc tcgtaattta tatttacagt 660
ataatcaggt atcttttggt ccgagaggag tatttaatga tctagtttca gttcagtact 720
taaacttaca aaggaatcgc ctactgtcc ttgggagtgg tacctttggt ggtatggttg 780
ctcttcggat acttgattta tcaaacaata acattttgag gatatacaga tcaggctttc 840
aacatcttga aaaccttgct tgtttgtatt taggaagtaa taatttaaca aaagtacat 900
caaatgcctt tgaagtactt aaaagtctta gaagactttc tttgtctcat aatcctattg 960
aagcaataca gccctttgca tttaaaggac ttgccaatct ggaatacctc ctctgaaaa 1020
attcaagaat taggaatggt actagggatg ggtttagtgg aattaataat cttaaacatt 1080
tgatcttaag tcataatgat ttagagaatt taaattctga cacattcagt ttgttaaaga 1140
atttaattta ccttaagtta gatagaaaca gaataattag cattgataat gatacatttg 1200
aaaatatggg agcatctttg aagatcctta atctgtcatt taataatctt acagccttgc 1260
atccaagggt ccttaagccg ttgtcttcat tgattcatct tcaggcaaat tctaatectt 1320
gggaatgtaa ctgcaaactt ttgggccttc gagactggct agcatcttca gccattactc 1380
```


taaacatcta ttgtcagaat ccccatcca tgcgtggcag agcattacgt tatattaaca 1440
 ttacaaattg tgttacatct tcaataaatg tatccagagc ttgggctgtt gtaaaatctc 1500
 ctcatattca tcacaagact actgcgctaa tgatggcctg gcataaagta accacaaatg 1560
 gcagtcctct ggaaaatact gagactgaga acattacttt ctgggaacga attcctactt 1620
 cacctgctgg tagatttttt caagagaatg cctttggtaa tccattagag actacagcag 1680
 tgttacctgt gcaaatacaa cttactactt ctgttacctt gaacttggaa aaaaacagtg 1740
 ctctaccgaa tgatgctgct tcaatgtcag ggaaaacatc tctaatttgt acacaagaag 1800
 ttgagaagtt gaatgaggct tttgacattt tgctagcttt tttcatctta gcttgtgttt 1860
 taatcatttt tttgatctac aaagttgttc agtttaaca aaaactaaag gcatcagaaa 1920
 actcaaggga aaatagactt gaatactaca gcttttatca gtcagcaagg tataatgtaa 1980
 ctgcctcaat ttgtaacact tccccaaatt ctctagaaag tcctggcttg gagcagattc 2040
 gacttcataa acaaattgtt cctgaaaatg aggcacaggc cattcttttt gaacattctg 2100
 ctttataact caactaata ttgtctataa gaaacttcag tgccatggac atgatttaaa 2160
 ctgaaacctc cttatataat tatatacttt agttggaaat ataatgaatt atatgaggtt 2220
 agcattatta aaatatgttt ttaat 2245

<210> 233

<211> 3316

<212> DNA

<213> Homo sapiens

<400> 233

acagctcagc gtccgcggag ccgggcggcg ctgcagctgc acttggctcg tctgtgggtc 60
 tgacagtccc agctctgcgc ggggaacagc ggcccggcgc tgggtgtggg aggaccaggc 120
 tgccccaaga gcgcgagac tcacgccgc tcctctctg ttgcgaccgg gagccgggta 180
 ggaggcaggc gcgctccctg cggccccggg atgacttctc agcgttccc tctggcgcct 240
 ttgctgctcc tctctctgca cgggtgttgc gcatccctgg aagtgtcaga gagccctggg 300
 agtatccagg tggcccgggg tcagacagca gtctgccct gcactttcac taccagcgt 360

gccctcatta acctcaatgt catttggatg gtcactcctc tctccaatgc caaccaacct 420
gaacagggtca tcctgtatca ggggtggacag atgtttgatg gtgccccccg gttccacgggt 480
agggtaggat ttacaggcac catgccagct accaatgtct ctatctacat taataacact 540
cagttatcag aacttggcac ctaccagtgc ctagtcaaca accttccaga catagggggc 600
aggaacattg gggtcaccgg tctcacagtg ttagttcccc cttctgcccc aacttgccaa 660
atccaaggat cccaggatat tggcagcgat gtcacccctgc tctgtagctc agaggaaggc 720
attcctcgac caacttacct ttgggagaag ttagacaata ccctcaaact acctccaaca 780
gctactcagg accagggtcca gggaacagtc accatccgga acatcagtgc cctgtcttca 840
gcccagccca ggaacattgg actaatagct ggagccattg gcactggtgc agttattatc 900
attttttgca ttgcactaat tttaggggca ttcttttact ggagaagcaa aaataaagag 960
gaggaagaag aagaaattcc taatgaaata agagaggatg atcttccacc caagtgttct 1020
tctgccaaag catttcacac tgagatttcc tcctcggaca acaacacact aacctcttcc 1080
aatgcctaca acagtcgata ctggagcaac aatccaaaag ttcatagaaa cacagagtca 1140
gtcagccact tcagtgactt gggccaatct ttctctttcc actcaggcaa tgccaacata 1200
ccatccattt atgctaattg gacccatctg gtcccgggtc aacataagac tctggtagtg 1260
acagccaaca gagggtcctc accacagggtg atgtccagga gcaatggctc agtcagtagg 1320
aagcctcggc ctccacacac tcattcctac accatcagcc acgcaacact ggaacgaatt 1380
gggtgcagtac ctgtcatggt accagcccag agtcggggccg ggtccttggt ataggacatg 1440
aggaaatgtt gtgttcagaa atgaataaat ggaatgcctt catacaaggg ggagggtggg 1500
gtggggagtg ctgggaaaga aacacttcct tataattata ttagtaaaat gcacaaagaa 1560
gaaggcagtg ctgttacttg gccactaaga tgtgtaaaat ggactgaaat gctccatcat 1620
gaagacttgc ttccccacca aagatgtcct gggattctgc tggatctcaa agatgtgcca 1680
agccaaggaa aaagatacaa gagcagaata gtacttaaaa tccaaactgc cgcccagatg 1740
ggcttgttct tcatgcctaa cttaataatt tttaagagat taaagtgcca gatggagttt 1800
aaatattgaa attattttaa aggtagggtg cttaagaaa ataacaagca accctgtgat 1860
atgttccgtc tctcccaatt cctcgttat atagagggtc taatggtata aatggttaat 1920
attggtccca acagggtga ctcttctatc atataatcaa aactttttac atgagcaaaa 1980
ttcagtaaga aatgggggaa gacaaaggaa acgtctttga gaagcccctt catatttatt 2040
tatttatctc ttcctgaacc atgaatttca tatgtggaat attgctatat tgacagattc 2100

ttgcctgtct gtgttattct aggatctgtt acagggtccat ggcaattact gtttattttt 2160
tcctggaaaa atattttttt ataaaaggct tttttttttt aaatacatga gaggcattgg 2220
gctaagaaag aaaagactgt tgtataatac cttgttcaat ggttgtattt agtgagctca 2280
tagaggcca tcatatcatg accgagctag gttgtgtggg caggaaggta gggctaaggg 2340
gtttagcct tgctgggcag cctctcagag caagggtgtt cagatctccc ttgctattac 2400
agtaggttac tattaatgag ggcagcacct gatgcctttt gtactgaggt atgtaacttt 2460
ctccttattt gacaagtaga agttaactta cttgtcaggg agggcagacg tttttttgtt 2520
ctgtttcgtt tttcaaaata atgctttttg caaaagaggt aagactgaga ctaaagggtgt 2580
tatcttctgg tgtgctcctg gaagtgtcta ccctacattt gtgtcagctc agggttgcag 2640
tgttgcccag atgcatttta catcactgta aagagattac ttttgtgggt actacctggc 2700
ttggctggcc ttgcggttca ccagattaat ttacaaactc cccacttta ttttgtgcta 2760
tgtagatctg gccatacttg cattagtgac tgtcttgctt taaccacact taagcaaccc 2820
acaaatttct tctcagattt gtttcctaga ttacttatga tactcatccc atgtctcaat 2880
aagagtgtct tttctttctg gatgtgttct cttactccct cttaccacca tactttttgc 2940
tctcttctcc tgcaagcgta gtcttcacag ggagtggctt cctgacattt ttttcagtta 3000
tgtgaatgaa tggaaaccaa cagctgctgc aaacactgtt tttccaagaa ggctacactc 3060
agaacctaac cattgccaac catttcagta ttgataaaaa gctgaattta ctttagcatt 3120
acttattttt ttttccattt gatggttctt actttgtaaa aatttaaata aatgaatgtc 3180
tatacttttt ataaagaaaa gtgaaaatac catgacactg aaaagatgat gctatcagat 3240
gctgtttaga aagcatttat cttgcatttc tttattcttt ctaattatct aaaattcaat 3300
aaaattttat tcatat 3316

<210> 234

<211> 2306

<212> DNA

<213> Homo sapiens

<400> 234

gttgctgctg ctgctaacgc cgcctccggg tggtagaccg ggggtggggg cggcccgctc 60
tgccctggga ccgggcagac acttccccgc gctgcctctc caacgagccg ggcagcacca 120
gccccactat gccccccact gaccctgat tgccccgagg ccgtcagcga acccccacga 180
ctgcggaccc ctctccacc ccagcacctt ccttgctga acaaccctgc ctagacacca 240
ggcagctgcc acctttgtct gtcctggaac ggtggggagg ggtctgccct cccgcccattg 300
ttccagggga tggagtcccc agaggctagg ccctagctca gaggctcaga ttgggctgtg 360
aagaccttgc tgcatatggg ttacactgag ccaccaggca cgggccatgc tgatgatacc 420
agctttcagc acgtggtgag gtgtgtatgg cttcccgtgg actcagcctc ttccccgagt 480
cctgtccaga tttctgctgt ggtacctgtg atgaccaata ctgctgctct gacgtgctga 540
agaaatttgt gtggagcgag gaaagggtgtg ctgtgcctga ggccagcgtg cctgccagt 600
tagagccggt ggagcagctg ggctcggcgc tgaggtttcg ccctggctac aacgacccca 660
tgtcagggtt cggagcgacc ttggccgttg gcctgaccat ctttgtgtg tctgtcgtca 720
ctatcatcat ctgcttcacc tgctcctgt gctgccttta caagacgtgc cgccgaccac 780
gtccggttgt caccaccacc acatccacca ctgtggtgca tgccccttat cctcagcctc 840
caagtgtgcc gccagctac cctggaccaa gctaccaggg ctaccacacc atgccgcctc 900
agccagggat gccagcagca ccctaccaa tgcagtacc accaccttac ccagcccagc 960
ccatggggcc accggcctac cagcagacc ttggctggagg agcagccgcg ccctaccccg 1020
ccagccagcc tccttacaac ccggcctaca tggatgcccc gaaggcggcc ctctgagcat 1080
tcctggcct ctctggctgc cacttggtta tgttgtgtgt gtgcgtgagt ggtgtgcagg 1140
cgcggttcct tacgccccat gtgtgctgtg tgtgtccagg cacggttcct tacgccccat 1200
gtgtgctgtg tgtgtcctgc ctgtatatgt ggcttcctct gatgctgaca aggtggggaa 1260
caatccttgc cagagtgggc tgggaccaga ctttgttctc ttctcacct gaaattatgc 1320
ttcctaaaat ctcaagcaa actcaaagaa tggggtgggtg gggggcaccc tgtgaggtgg 1380
cccctgagag gtgggggcct ctccagggca catctggagt tcttctccag cttaccctag 1440
ggtgaccaag tagggcctgt cacaccaggg tggcgagct ttctgtgtga tgcagatgtg 1500
tcctggtttc ggcagcgtag ccagctgctg cttgaggcca tggctcgtcc ccggagttag 1560
gggtaccctg tgcagagcca gggacatgat gcaggcgaag cttgggatct ggccaagttag 1620
gactttgatc ctttgggcag atgtccatt gctccctgga gcctgtcatg cctgttgggg 1680
atcaggcagc ctctgatgc cagaacacct caggcagagc cctactcagc tgtacctgtc 1740

tgcttgact gtcccctgtc cccgcatctc ccctgggacc agctggaggg ccacatgcac 1800
 acacagccta gctgccccca gggagctctg ctgcccttgc tggccctgcc cttcccacag 1860
 gtgagcaggg ctccctgtcca ccagcacact cagtctcttt ccctgcagtg ttttcatttt 1920
 atttttagcca aacattttgc ctgttttctg tttcaaacat gatagttgat atgagactga 1980
 aaccctggg ttgtggaggg aaattggctc agagatggac aacctggcaa ctgtgagtcc 2040
 ctgcttcccg acaccagcct catggaatat gcaacaactc ctgtaccca gtccacggtg 2100
 ttctggcagc agggacacct gggccaatgg gccatctgga ccaaaggtgg ggtgtggggc 2160
 cctggatggc agctctggcc cagacatgaa tacctcgtgt tcctcctccc tctattactg 2220
 tttcaccaga gctgtcttag ctcaaactcg ttgtgtttct gagtctaggg tctgtacact 2280
 tgtttataat aaatgcaatc gtttgg 2306

<210> 235

<211> 2247

<212> DNA

<213> Homo sapiens

<400> 235

acaaactcaa gcattagcac caacaagctc tgagcatcat cagtctctgg aaagccttct 60
 gaattagaca agggctgcct cccagcacag ctacaaaaca ctttaaacct gaccagctaa 120
 atggataaac ctgacctgca tagcttttaa actggggtct catacagcac aggaggccta 180
 cttgcttcaa gaactgaaaa tccagaggat gaattgcttt atctgggaat ggcaaaagcc 240
 agcacaataa ggaatgccag gtggtggtgg tttccgcaca agagaccaa taagaagaaa 300
 gctgagagag gggggaaacg tttttggatg acaaaggatg gggttccatt taattacgca 360
 gctgaaaggc atgagtgtgg tgctggtgct acttcctaca ctgctgcttg ttatgctcac 420
 ggggtgctcag agagcttgcc caaagaactg cagatgtgat ggcaaaattg tgtactgtga 480
 gtctcatgct ttcgcagata tccctgagaa catctctgga gggtcacaag gcttatcatt 540
 aaggttcaac agcattcaga agctcaaact caatcagttt gccggcctta accagcttat 600
 atggctttac cttgaccata attacattag ctgagtggat gaagatgcat ttcaagggat 660

ccgtagactg aaagaattaa ttctaagctc caacaaaatt acttatctgc acaataaaac 720
atttcacca gttcccaatc tccgcaatct ggacctctcc tacaataagc ttcagacatt 780
gcaatctgaa caatttaaag gccttcggaa actcatcatt ttgcacttga gatctaactc 840
actaaagact gtgcccataa gagtttttca agactgtcgg aatcttgatt ttttggattt 900
gggttacaat cgtcttcgaa gcttgtcccg aaatgcattt gctggcctct tgaagttaaa 960
ggagctccac ctggagcaca accagttttc caagatcaac ttgtctcatt ttccacgtct 1020
cttcaacctc cgctcaattt acttacaatg gaacaggatt cgctccatta gccaagggtt 1080
gacatggact tggagttcct tacacaactt ggatttatca gggaatgaca tccaaggaat 1140
tgagccgggc acatttaa at gcctcccca tttacaaaaa ttgaatttgg attccaacaa 1200
gtcaccaat atctcacagg aaactgtcaa tgcgtggata tcattaatat ccatcacatt 1260
gtctggaaat atgtgggaat gcagtcggag catttgtcct ttattttatt ggcttaagaa 1320
tttcaaagga aataaggaaa gcaccatgat atgtgcggga cctaagcaca tccagggtga 1380
aaaggtagt gatgcagtgg aaacatataa tatctgttct gaagtccagg tggtaaacac 1440
agaaagatca cacctggtgc cccaaactcc ccagaagcct ctgattatcc ctagacctac 1500
catcttcaaa cctgacgtca cccaatccac ctttgaaaca ccaagccctt cccaggggtt 1560
tcagattcct ggcgagagc aagagtatga gcatgtttca tttcacaaaa ttattgccgg 1620
gagtgtggct ctctttctct cagtggccat gatcctcttg gtgatctatg tgtcttggaa 1680
acgtaccca gccagcatga aacaactcca gcaacactct cttatgaaga ggcgccggaa 1740
aaaggccaga gagtctgaaa gacaaatgaa ttccccitta caggagtatt atgtggacta 1800
caagcctaca aactctgaga ccatggatat atcggttaat ggatctgggc cctgcacata 1860
taccatctct ggctccaggg aatgtgagat gccacaccac atgaagccct tgccatatta 1920
cagctatggc cagcctgtga tcgggtactg ccaggccac cagccactcc atgtcaccaa 1980
gggctatgag acagtgtctc cagagcagga cgaaagcccc ggcctggagc tgggccgaga 2040
ccacagcttc atgccacca tcgccaggtc ggcagcaccg gccatctacc tagagagaat 2100
tgcaaaactaa cgctgaagcc aactcctcac tggggagctc catggggggg agggagggcc 2160
ttcatcttaa aggagaatgg gtgtccacaa tcgcgcaatc gagcaagctc atcgttcctg 2220
ttaaacaatt tatggcatag agaaaag 2247

<210> 236

<211> 2775

<212> DNA

<213> Homo sapiens

<400> 236

```
actagaagag aatttctggt tatccggtca ccatattcac tttccacccc acattcttca 60
gctaaacgca aagagaagca gtgaaacagc cttacccgct tctctcttat taaagaatca 120
ctgatgtttt tactcaatga aaggtaaagt aataccctta gccatttatt aaacaattca 180
accaagagac ctcaaagtgt gattgatgat aagaataatc aatgcctttt cccttccaac 240
atacttgagc agtcatgaca acctaaaaat atcattgggt gctttcccat taaaaccaac 300
gttccctgtg ggtcttaatt ctttattttc actcatttgg tgctttccaa gtcattcttt 360
ctttaaagtg cccttctctc aaacttttaa aagtacttcc ttgacaaaat ttctattcat 420
tataaaacat ttcgatattt taagcttaaa ttttgctttt gctgaaagcc taccatttgg 480
cgtgttaagt atgaaatata gtgcagactt ttatcttggg tttaagtggg gctcaataaa 540
aaacaccagc cacttttgta ataatggcat cacagtgtca tcatgtatgc aagcaataaa 600
actctttagg gtatggtttt atactgaaaa tttaatatga aggccccttc ccacaagaat 660
atagataatt attaactttc tagatgtgat acggtaattc gaattgcaga gtataaggaa 720
gggaaatggg aaggggcatc attccttgga ttttaaataa caagaacatt tttactttaa 780
caaagaaaat ggatagaaaa agcacatttt gttttccctg aagtttaatt tgacatcagg 840
tttgtgtact tatcttcact aggtgactta acttacccca atttttttaa aaattattaa 900
actttttaca gaaactaacc ttttaaagt accctttccc catatatata tacgcacacg 960
tttggatttt ttttttttaa gaacacttgt tctagttata aatatataaa gaaaacgata 1020
aagtttgtgg tactgcaggg ttgttaaaga ttctttgatg ctttctaaaa acttttgtca 1080
aaaatacttt tgagttcaca attctgtttt acttttccct gtccttactt tttggaaaca 1140
gggtggttgc ttttatttgt tttctggtta tattcaaagc cttaagttct taatctgagc 1200
atattgtctg tgataaattt ctgatgatct ttctggacta gatacaacct gagtagcaag 1260
caccaaccgg agcaagtaaa cttctaggga acaagcgtct tgggttttat aggtatcttt 1320
gctataatgc agaatagatt aatgaagatt tcctatatca tatgatattt gtgttagtgg 1380
```

gtctaagatt aagcacatga tatttataag ctaaaattaa ctcaaaagtc aagaatgtct 1440
taatgttttc attcttgaat tttgtattct ccaagaatgt attagtatat gaactgtggc 1500
caaccagttc ctattcttca gactgtattg acatctgtag tggatcatgt tgcttcttca 1560
ttcttaccaa ttttattaga atcaaacttc ttgttatttg catactatta tctactatag 1620
attctcagct ttagaaaatg actatgatac ataaagacca ctaggtcaac ttaaaaaacc 1680
ctttctgtga atttacacat gtatgtatat atgtaaaaac actgttgatt tgcaattctg 1740
tctttccata gaaatgaact ttttctatcg aaattgttta acttaaatat tttaacataa 1800
attatttaca tggatcttta tgtataattc atccttatat ataccctta atcacgtagt 1860
catgagaaga taactttgct ttctttacag aaagggcaga gaggaataag ataagaaact 1920
gaaacaagca agaatgaaga gagatgtggg ggagagactg ctggtctcca gaccacagca 1980
atgtgtttta agataagatg aaatatTTTA actgcagaag ggatataaaa tctatgtaat 2040
tacaTgctga tgggatccat tgcacccagg tttttgacct tggcctgtaa atgctagact 2100
atgatatctt gttattcttt ttctcctttg ggctttttaa aaataatttc attctcagat 2160
cattttctgt actgtttact gaggcaaaaa aaaaaaaaaat ctgaagtcaa tcatggctctt 2220
ctactttctg gactgagcat ttggcagaat gcagtatctt ttcctgtatt ttgacatgaa 2280
atagcacatg gcttctacaa gatagtTTTA acttgttggg gtcaccggga gttatatgat 2340
ggTcaacccc ttttccaaa attcattgtg gtagttttag tggaaaacgt aaatcaagaa 2400
atctcatatc atactttaat aaataaatac caaatacata gtgacatata ggtttgggaa 2460
gaaactagtc tgtggggacc attataagag aatcacatta tatattacac agtatatgga 2520
tattggaatg tatcacttgt ggggggttct cttcattagc aaaacagtca tgtctgtctg 2580
tatataagac tttttttttt taaccaaact agcatttcat tttgtgagtg acaattgaca 2640
ttttaaaata agcataggcc gggcatagtg gctcatgcct gtaatcccag cccttgggag 2700
gccgaggTgg gcagatcact tcaggtcagg agtttgagac cagcctggcc aacatggtga 2760
aaccctgtct ctact 2775

<210> 237

<211> 2298

<212> DNA

<213> Homo sapiens

<400> 237

aagacccagc	cccagaccag	gccctagcag	ttcatagtct	gatacgggtg	ttctcagcca	60
gggggtgattt	tgatccccag	gtaatatatta	acaatgtctg	gagatgcttc	tggtgtctgc	120
acttgtgggg	gctgggaggt	atgctattat	catctagcgg	gtagtggcca	cggatgctgc	180
taaacatcct	actctgctga	ggacagtcct	tcaacaagga	gttccccatc	ccaattgtca	240
aaagtgccac	ggttgagaaa	ctttggtcta	atgaaagtgt	cagaaacata	tacagacacc	300
aacagcacag	caggtcagca	tgcgggcttc	agcgtccaga	ggaggtacat	agaccagcag	360
gcggtgaggt	gtcagataag	gcttctgagg	gaagaaactc	ccctgcaggg	ggtttgga	420
gaacatgtat	ggaagggagc	aggacacatg	gaaccaagga	acaactgcag	tccttcagt	480
cacacagccc	agagagagag	gggagaggag	ttccaggcta	gagccacgga	agccttgag	540
gctgtgttaa	ggagggagac	ttcatccaga	taggagtgg	aaggcattgt	gggatgctaa	600
gcaggggagg	gatgtagaca	gatgcctgct	ttagaaggca	cctcctcctg	gggatacagg	660
aaccctcagg	cactgctggt	aagatggtaa	attggtgccg	ctcttctgga	atctgtagaa	720
atctgtcatt	attcggtcac	ttcagtctta	ttaagttcat	gcataccac	gactgagcag	780
ttccactcat	ggatacatag	ctcgggggaa	tattccacag	gtccataaag	agagatgcat	840
gaggaagttg	atcagtgttc	tttgtggtgg	tggggagagg	aggcagcctg	ggtatccacc	900
ccttgggaga	gtatgtgtgc	tgtggagccc	tgcacagcag	ttcggggctg	ccagatggga	960
cctaaaaccc	agtgtgtagg	ggaaaaagt	tatcaagaat	gtatacaca	aagttggcca	1020
ggcgcggtgg	cttacttctg	taatgccagc	actttgggag	cctgaagcgg	gtggatcacc	1080
tgagtcagga	gttcgagacc	agcctgacaa	acatggttaa	acccgtctc	tactagaaat	1140
acaaaattgg	ccaggcgtgg	tggcgcatac	ctgtaatccc	agctactcag	gaggctgagg	1200
caggagaatc	gcttgaacct	gggaggcgga	ggttgcagt	agccaaggtc	gcgccattgc	1260
actcctgcct	aggcaataag	agtgaaactc	catctcaaaa	aaaaaaaaa	aaaaaaaaa	1320
gaatgtacac	acaaaagaat	tcacattttg	gaagaacact	tagaaactga	gaagacacag	1380
taaacacact	agaggccagg	tgtggtggct	catgcctgta	atcccaacac	tttagagggc	1440
caaggtggga	ggatcacttg	aggccaggag	ttcaagacca	gcctgggcaa	catagtgaga	1500
cctccatctc	tataaaacaa	aacaaaaaaa	tgctaataaa	acatgctaga	atgattgatt	1560

agggtaagga ggagggcttt ggggtataaa agggagtaaa taaaaaagga agcagaagaa 1620
 gctcactatg tcatggagtg aaagggctgg atggcagggt ggacaagagc accatcaggg 1680
 agacttagcc agaaactgct gagagaacag tgaccagacc ttgcagcaca aaatggagag 1740
 gatggccagg cctgcaggag actgaggaag gggattttca gaggcctagt gttgacagaa 1800
 tggaggaggg aggagggaga gggaggagct gagtttggca cccagatttc tgggtggatg 1860
 actaagccaa tggagcccac actaagtggg gaaccagga ccaggagcag gttgtggggc 1920
 aggggatgag ttcaatatgg gcatggtaag cttgagggtac tgtgcagcaa gctagtggag 1980
 atatccacag ggcagttggc tgccgctgtg gtctgaatgc tgtgtccctg caaattcata 2040
 tgaaatccga accccaagg tcattatatt aggaggtggg ggcctttgag aggtgattag 2100
 ggattagtga atgggattag tgcccttata aaaaagagcc ttcagagagc tccctcacta 2160
 ctacacccat gggaggacac tgagaagatg gcatctgtga accagaaagc aggcctcac 2220
 cagacaccga atctgccagg cttgatctc ggacttccca gcctccacaa ctgtgagaaa 2280
 taaatgtttg ctgtttac 2298

<210> 238

<211> 3057

<212> DNA

<213> Homo sapiens

<400> 238

tcattatgct ggcaaaggca tgggtacaac ctgctctgtg atctaccttc tgaaccacac 60
 aagcttgtcc tgaacgaggt tggggctgag tctgttgata acagaccccc atttttgggc 120
 agaaaaaaca gattctgtat gatctacagt atttaacatt gtggcaaata aattataaag 180
 gaaaaatgga atctcaagta gttacagtct cttgggtgtct ttcaacattg gttttatttt 240
 gaagtcattt tcaccagca ttgcaagttt agcagacctc aaaacagaat gccaaagtga 300
 tcttaaaatt caaaaatgag tttactttct ttgttaaagt tctcttttga tgcatatccc 360
 ccattcatgg aatggaagca ttatcttggg tgcagcatta cacgtagagt taaaatgtgg 420
 aaacaacca aacatcctga tatggtttgg ctctgtgtca ccaccaaatt ctcatcttga 480

attgtactct cataattccc atgtgtttgtg ggaggaaccc agtgggagat aatttgaatc 540
atgggggcag tttccctcat actgtttctca tggtagtgaa taactctcac aagaccgggt 600
ggttttatca ggggtttccg cttttgcac tttactcattt tctcttgcgg ccgcatgta 660
agaagtgcct ttcacctcct gccatgattc tgaggcctcc ccagccatgt ggaactgtaa 720
gtccaattaa accccttttt tccccagtct caggtagctc ttttatcagc agcgtgaaaa 780
tggactaata cagtaaattg gtaccagtag agcagggtgtt gctgcaaaga taccgggaaa 840
tgtggaagca actttggaac ttggtaacag gcagagattg gaacagtttg gagggctcag 900
aagaagacag gaaaatggga aagtttggaa cttccttgag acttgttgaa tggctttgac 960
aaaaatactg ataatgatat ggacaatgaa atctagactg aggtgggtctc aggtggagat 1020
gaggaacctg ttgagaactg gagcaaagggt gactcttggt atgatttagc aaagagactg 1080
gcggcatttt gccctgccc tggagatttg tggaactctg aacttgagag agatgattaa 1140
gggtatctgg tggaagaaat ttctaagcag caaagcattc aagaggtgac tcaagtgttg 1200
ttaaaggcat tcagttttaa aagggaagca gagcattaaa attcagaaaa ttagcagctt 1260
gacaatgcga tagaaaagaa aatcctatct tctgaggaga aattcaagct ggctgtagat 1320
atttgcataa gtaacaagga actgaatgtt aatttccaag acaatgggga aaatgtctcc 1380
agggcatgtc agagacattt gtggcagcct cttctatcac agacctggag gtctaggaag 1440
aaaaaatggt aaaaatgggt ttgtgggcaa ggccagggt ccttggtgtg tgtgcagtct 1500
aaggacttgg tgccctgttt cctagccact ccggccatgg ctgaaagggg ccaacatgaa 1560
gctcaggcca tggtttcaga gggtgaaagc ctttaagcctt ggcaacttcc atgtgatgtt 1620
gagcatgtgg gtgcacagaa gtcaagaaat ggggtttggg aacctctgtc tagatttcag 1680
aagatgtatg gaaatgcctg gatgccagg cagaagtttg ctgcaggggc ggggctctca 1740
tggagaacct cggctagggc agtgcagaag ggaaatgtgg ggttgagacc ccctcacaga 1800
gtccctactg ggacaccgcc tagtggagct gtgagaagag gaccactgtc ctccagaccc 1860
cagaatggta gatcgactta cagcttgtac caggtagcctg gaaaagctgc agatactcaa 1920
caccagccca tgaaagcagc caggatggag gctgtaccct gaaagccaca gggccagagc 1980
tgcccaagac catgggaagc cacctcttgc atcagcgtga cctggatgtg agacctggag 2040
taaaaggaga ccattttgga gctttaaaat ttgactgccc cactggattt tggacttcca 2100
tgggccctgt aaccctttt ttttggccaa tttctcccat ttggaatggc tgtatttacc 2160
caatacctgt accctcattg tatctaggaa gtaactagct tgcttttgat tttacaggct 2220

cataagtgga agggacttgc cttgtctcag atgagacttt tgaactgtgg acttttgggt 2280
taatgctgaa atgatttaag actttgggggt actgttggga atgcatgatt ggttttgaaa 2340
tgtgaggaca taagatttgg aggagccagg ggtgggatga tatggtttgg ctctgtgtcc 2400
ccacccaaat ttcacttga attatactcc cataattccc atgtgttata cgtgggacct 2460
ggtaggggat aatttgaatc atgggggtgg tttcccccat actgttctca tggtagagaa 2520
taagtctcat gagatctgat ggtttcatca ggggggttccg cttttgcatc ttactcattt 2580
ctcttgctgc caccctgtaa gaagtatfff taacctaccg ccatgattct gaggcctccc 2640
cagccatgtg gaactataag tccaattaaa cctctttttc ttggcttaat ttcttgggta 2700
tgtctttatc agcagtgatt ctattcctat gaaatgtcta gaacaggaaa atctatgaga 2760
cataaagtaa ttaagtggct gttcagggga tacaggaata ggggataata actaaagggt 2820
tgaggagggtg tttttgaaat gctaaaatat tctgaagttt actgtgggta tggttgcaca 2880
tacitatgaa tatacctaaa aatgttgaat tgtacatttt aagtagatga attgtatcta 2940
atttgaacca tatctcagta aagatataaa aatgtttttg ggtactaaga ctaaattaga 3000
aagaacataa gaggaatac atattatata agaagaaaag agtaaaaata aatcttt 3057

<210> 239

<211> 2464

<212> DNA

<213> Homo sapiens

<400> 239

caataatcgg agaacaccac aagacattta caaccaactg aagattgaac caaggaatag 60
acatagccct gttgcatgtt caacgaaaga caccttcatg acggaactct tgaacagagt 120
tgataagaaa gcagctccac agacagaaag tggatcaagt aatgcttcct gcaggaatgt 180
gttaaagggc agttctcagg gctcctgtct catcggcagc tctatcagta ctcaaggaaa 240
ccacaagaaa aacatgaaaa tcaaagccga tatggaagta ccaaagact ccctggtaaa 300
agaggcaaat gaaaacttgc aagaggatga agacgatgca gttgcagatt ctgtatttca 360
gagccacatc atagaatcca actgccagat gagaacattg gacagtggga tcggaacctt 420

tccactccca gactcgggaa atcgctcgac aggacgctac ctatgccagc cagactcccc 480
agaggacgct gagcctctcc tgcctctcca gtcagccctt tctgcagttt cttccatgag 540
agcccaaacc cttgaacgtg aagtgccttc ctccacagac ggccagcgcc ctgcagatag 600
cgccattgtt cattccacat ccgaccccat catgaccgcc agagggatga ggcctcttca 660
gagccgcctc cccaaaccag ctctctcagg aaaagtcagt tcccaaaagc agaatgaagc 720
agagccaagg cctcagacat gctcatcatt cggatatgct gaagacccaa tggcaagcca 780
gccgcttcca gactggggga gtgaagttgc tgccaccggg acccaggaca aggcacccag 840
aatgtgtacg tactctgcca gcggtggcag taatagtac agtgacctgg actatggaga 900
taatggtttt ggagctggaa ggggacagtt agtgaaagca ctgaagagcg ctgccccaga 960
aattgagaca acttgaagaa acaaaagacg atcccgagaa tagattatcg aaaatttccc 1020
tagagtcatt caataaattt aacagcaata ctgtgatttt attagaaaaa gagaagaact 1080
ctctgaacaa ggttgaagga cagaaggaag aaaaagaaaa aaatgaagag acatctttga 1140
gtagttcaga taggcctggg gtagacaact tggaatcttt gagtgattct ttatatgata 1200
gcttctcttc ctgtgccagt caaggttcaa atgatgtata aaggacatct cttcccttag 1260
tgagctggga ctggagcgct taagaaatga tgggtggggg gtgggggggtg caccgcttga 1320
tagagataac aataaactat tgcagtacca gagccttcct tgtcaaattc acagcaggca 1380
accaccaga gcttatttct ctgacagggc aataaagata gactccattt attgtgtttc 1440
aagaggatta agcgtaaaca catctatgat acagaatcct taattttgca ctttttttga 1500
atatttgtag agaagttgta aattttttgg aagagaaatt atatttgtag caaaaaaaga 1560
cagcaataaa tggaatcagt gccatgctct tgaaataatg tactaagtct tagaagttga 1620
tgataatata tattttttta aatcccaact gaagtttttg tgaagttcgt tgtcctggtc 1680
ctcaaattgt ttgtgggtac actctgtaaa cctacaacag ggcctgccaa aaaatcggag 1740
ggttcctcct catctccatc tcacaaatct caatttgatg gaaatgttca ttttagtgta 1800
atttcagatt cgttgccaga gattcagggtg atagtaataa gtgtcattct gcttctgctg 1860
aaaaatgaaa agggtcctga agtgtggaca ctgattggga gtgtgacatt gtatcagaaa 1920
tgaccgaatt ctattcccaa taccagtttt tccttcaga catttctttg gattgtcttt 1980
tacttagtgc ttctctatga tcctgaatat tatttgattt ttatcttctt gctcttttta 2040
ttaaaatctg ggcactctaa aaatgaaaac aaatttctat ttgcaatgtt cacttttaaa 2100
aataaaatta atggtgctac gaagaattct ttttaatatc cttttttttc tacaaagact 2160

gtttatatgt aaggataaat tctatitttaa aggttatgtg tattttttct agatgtgaac 2220
tatttataat tacttatgta caggagcttg taaactaggc ccaatagaaa tatttttagg 2280
atctatatgg ctactttagc acataattgt ttctttaaag agtattgtat gatcagtgtt 2340
atttggttaa tttgtgcaat ttgttttatt ttatcttaaa tgaaaattat gtaaaatgtc 2400
cttgtctttc agactttaaa aaatcttttt gtttcctttc tgaataaaaag ttatatcaca 2460
tttg 2464

<210> 240

<211> 2894

<212> DNA

<213> Homo sapiens

<400> 240

tgttatttgc acaggattat ggtgcaaggt agaaggtgag aaagaatgca gaaccaagct 60
agaccaccca atggatggaa ctgactgtga ccttggttaag tgggtgaagg ctggagaatg 120
taccagcagg acctcagcac ctgaacatct ggccggagag tggagcctgt ggagtccttg 180
tagccgaacc tgcagtgtcg ggatcagcag tcgagagcgc aaatgtcctg ggctagattc 240
tgaagcaagg gattgtaatg gtcccagaaa acaatacaga atatgtgaga atccaccttg 300
tcctgcaggt ttgcctggat tcagagactg gcaatgtcag gcttatagtg ttagaacttc 360
ctccccaag catatacttc agtggcaagc tgccttgat gaagaaaaac catgtgcctt 420
gttttgctct cctgttgga aagaacagcc tattcttcta tcagaaaaag tgatggatgg 480
aacttcttgt ggctatcagg gattagatat ctgtgcaaat ggcaggtgcc agaaagttag 540
ctgtgatggt ttattagggt ctcttgcaag agaagatcat tgtggtgtat gcaatggcaa 600
tggaatatca tgcaagatca ttaaagggga ttttaatcac accagaggag caggttatgt 660
agaagtgtcg gtgatactcg ctggagcaag aagaatcaaa gttgtggagg aaaagccggc 720
acatagctat ttagctctcc gagatgtcgg caaacagtct attaatagtg actggaagat 780
tgaacactct ggagccttca atttggctgg aactaccgtt cattatgtaa gacgaggcct 840
ctgggagaag atctctgcca aaggctctac tacagcacct ttacatcttc tgggtgctcct 900

gtttcaggat cagaattatg gtcttcacta tgaatacact atcccatcag accctcttcc 960
agaaaaccag agctctaaag cacctgagcc cctcttcatg tggacacaca caagctggga 1020
agattgcat gccacttgtg gaggaggaga aaggaagaca acagtgtcct gcacaaaaat 1080
catgagcaaa aatatcagca ttgtggacaa tgagaaatgc aaatacttaa ccaagccaga 1140
gccacagatt cgaaagtgc atgagcaacc atgtcaaaca aggtggatga tgacagaatg 1200
gaccccttgt tcacgaactt gtggaaaagg aatgcagagc agacaagtgg cctgtaccca 1260
acaactgagc aatggaacac tgattagagc ccgagagagg gactgcattg ggcccaagcc 1320
cgctctgcc cagcgctgtg agggccagga ctgcatgacc gtgtgggagg cgggagtgtg 1380
gtctgagtgt tcagtcaagt gtggcaaagg catacgtcat cggaccgtta gatgtacca 1440
ccaagaagg aagtgtgtcc tctctaccag acccaggagg gctgaagact gtgaggatta 1500
ttcaaatgc tatgtgtggc gaatgggtga ctggtctaag tgctcaatta cctgtggcaa 1560
aggaatgcag tcccgtgtaa tccaatgcat gcataagatc acaggaagac atggaaatgg 1620
atgtttttcc tcagaaaaac ctgcagcata caggccatgc catcttcaac cctgcaatga 1680
gaaaattaat gtaaatacca taacatcacc cagactggct gctctgactt tcaagtgcct 1740
gggagatcag tggccagtgt actgccgagt gatacgtgag aagaacctat gtcaggacat 1800
gcggtggtat cagcgctgct gtgaaacatg cagggacttc tatgccccaa agctgcagca 1860
gaagagtga cctctagcag gctggctgga tcacagctct ttgcaattac attatttata 1920
aacacacaca ctagcatgtt tttcagacca aatattatca gattacatat aatttaatca 1980
aattaattta tttttttgcc tgccaaacat ccaatgtggt gcttgttttg gttacacaaa 2040
cattttgatt tatactatat ggcttcataa ataattttat atgaatgaat tagttggatc 2100
cagtaatata ataaaaagaa aaaggaaaaa aatagatcat tatacttaaa acaaggtttc 2160
gttgtttgtt agggctatct ctaagggtgct actctctccc caccaataac attgaattat 2220
ccagaatgta tactgactta gcataatagt ttaggtgtat atgaagagaa actatttttg 2280
ttttttggtg tcctgctgca gaattagccc attttctgtc acctgcagga gatgtgtaaa 2340
cataatgaac ctcatgctgt tgaacagggt tttagagaat gtattatgaa tttggttcag 2400
atttatagac atccatagga aaaattctgc tgtaattata acctatttt gatatggaaa 2460
agaaaagtca aaatagagac tttgatcatg ttcatagaaca tgtacttgaa cacaagtatt 2520
gtaacaatga aacactgtaa tgatttacac tgaatcaciaa ttgcactgtt gatatagtgt 2580
agagaaatcg ttagaaatgg tgacatctta caaaaaatgt gtattatttt aacatgttat 2640

cactagattt tagctttttt taaatatatt taacaaagaa aacattgac caccatttc 2700
cctgtatctt tttagcagat ttattaaaga gtatagtact tagcctcacg aatcataatt 2760
agaaaaattt ctagtatttc tcagcctttt ccctaggaac aaggaaaaac agaaagcata 2820
taatacgggtg gtcgtttcat tgtgtttttt ttccttttaa aaattaaaaa gttttacaat 2880
tatgtgaaac gttc 2894

<210> 241

<211> 1868

<212> DNA

<213> Homo sapiens

<400> 241

ctgatcatta gagaaatgca aaggagaacc acaatgagat accatctcat gccggtcaga 60
atgggtgatta ttaaaaagtc aaaaaacaac agatgctggc gaggctgtgg agaagtagga 120
acactttttac attgttggtg ggaatgtaaa ttagttcaac cgttgtggaa gtgtgtgtgg 180
ctattcctca aagatctaga actagaaata ctatttgtcc cagcaatccc attactgggt 240
atatacccaa aggaatataa accattttat tataaagata catgcacatt tttgttcatt 300
gcagcactct tcacaatagc aaagacacaa tagcaaatgc ccatcaaaga tagactggat 360
aaagaaaatg tgggtacatat acaccatgga atactgtgca gtgcagccat tacagctttt 420
gggtgatacag tgaatcagat ttttcattaa ttcttttaat tggttattac tgaacgtgaa 480
aaagtaatgt ttgtattgaa atcttgagtc tggccatgtt tctattttaa attcataaag 540
aattctaaca agaggaattc caagaatgtc ataaatggat gtttctccat ggatgaagga 600
actgttttat tcaattgctg ataattcagc ctaatccagt ttgacatcat atagataagt 660
agttgaatta tggattttaa atacatatca ttttctaact ccaaaggtaa tacttattta 720
aatgggtttg aaaatataga aaggcacaat ttctttttaa atctgttatt ctccaccacc 780
actcaatctg tctatcatct atctctccat tcattcttcc atttgtttat atctgttaat 840
ctttgtatgt gttcatgtat agctttttaca tgattggaat cataatgcat attccatttt 900
gaagtctgct tttttttaca caaaaatatg ttgtgaatat tttcctatat tatgaaatat 960

cattagctga gcttttagaa ttgactgcat gttttggtac catttagata tagtttaaga 1020
tacttagaag ttatgtggct ttgccactat ggatgaatct tatttactca atattaacta 1080
cttacaata acctcaccta aacactactc agccataaaa aggaatgaat taatgacatt 1140
cacagcaacc tggagactat tactctaaag gaagtaactg aggaatggaa aaccaaacat 1200
tgtatgttct cactcataag tgggagataa gctatgaggg tgcaaaggca taagaaggat 1260
acaatggact ttggggactt aggggaaagg gtgggagggg ggtgaaggat aaaagaatac 1320
aaattgggtt cagtgtatac tgctcaggtg atgggtgcac cagaatctca caagtaacca 1380
cttaattact tacgcatgta accagatacc acctgttccc caaacaccta tggaaataat 1440
tttgtttttt tttttaaaaa aggaatgaga tcatgtcctt tgcagggaca tggatgaagc 1500
tggaagccat taccctcagc aaactaacag aggagcagga aaccaaacac cacatgttct 1560
cacttgtaag cggaagctga acaatgagaa cacacggaca cagggatgag atcaacacac 1620
actggggcct gatgcagggg ccgtagcggg gagagcatca ggataactag ctaatgcatg 1680
tggggcttaa tacctaggtg ataggttgat aggtgcagca aaccaccatg ggacacgttt 1740
acctatgtaa caaacccgca catcctgcac ttgtatccag aacttaaaat attttaaaaa 1800
tctttagaga atacaaaaaa aaaaaaaaaag attcttcaat gcatacacia taaaattgca 1860
gttcagtc 1868

<210> 242

<211> 2188

<212> DNA

<213> Homo sapiens

<400> 242

tttgcacaag gtgatcgcaa aacaccaggc caaatgaaat caaaagaacg tcatccttgt 60
tctccaagt atcacaggag atcaagaagc ccagccaaa gaagaactcg aagtagaagt 120
tcttcatggg gaagaaatag gaggcggtca gacagcctta aagagtctcg acacaggcga 180
ttttcttata gccagtctaa atctcgttcc aaatcattac caaggcggtc tacctcagca 240
aggcagtc aaactccaag aaggaatttt ggctctagag gacgggtcaag gtccaagtcc 300

ttacaaaaga ggtccaagtc aataggaaaa tcacagtcaa gttcacctca aaagcagact 360
agctcaggaa caaaatcaag atcacatgga agacattctg actcaatagc aagatccccg 420
tgtaaatctc ccaaagggtta taccaattct gaaactaaag taaaaacagc aaagcattct 480
cattttcggg cacattccag atctcgaagt tatcgtcata aaaacagttg gtgaacagca 540
acagaaaagag caccacgccg tctttaatat aagttattaa actctcatta tgttaaataa 600
aaattcttta aggcatacag aaaatgcgag ttgatattag ttactttggg catatggaag 660
aaataaaatc tctagctttg gattaataag aatttgggtc ccatttaaag ggcccacact 720
acaaattatg atttgtctaa tgtcaccatt ttatggacca ttttttattt acatttgtgc 780
agaagggtac ttttcaaggg aaatgagtaa actggaacta atttttaaaa ttctacttgc 840
atagtattag tactattaat aatacctttt acacaaatat ttttgacttt aaagcacttt 900
catgtaaaaa gtaactatga ctgtataatt gcatagagca gacttaagct gtttgacacc 960
tatgtctctt ttgtgtcttc tgtttaaact tgggcccaatt cctggtggat attagtcat 1020
attacaaaat tctgatgttc caaaaagtag aatatatata gagatcaaac attcaaaaaga 1080
tacattctct cctaagctca aaggttatat ttttattggg tagaacagta taggtaagtt 1140
gacatgaaat tgcacctgc accatgacca cattagtaat atcagaactt ttgagaaata 1200
ctggattttg aatggtttga gactaattct ttaaaaatta ggctgagcaa cactcacaat 1260
ccaaaaatat tcatattaag acttacacat ttgaagaatg gtacattttg tataaaatca 1320
tatttgatac cattatttcc acatacctac ttttcatctg ttgcttaatt ttttcttttt 1380
agagtcttg ctcaacttta tatggaacaa gtcttattat ttttgaaaga gtgttttagta 1440
ccttgtatta agaaacttgg ccaagcgtgg tggttcactc ctgtaatccc agcactttgg 1500
gaggctcagg cgggcagatt gcttgaggcc aggagattga gaccagcctg ggcaacatgg 1560
tgaaatcctg tctctaaaat ttaaaaaaaaa gaagaagaag aaactcgaga ctacatcttc 1620
aaaaaacaac tttgcagtat ttgaatttta cattatactg cccttcattt ctgacagcca 1680
aataacttta ttgatattta ttgcttttgt agttgttata actaataatt tctttgaaaa 1740
tgtgtttagt tttatgtttt tcaaagggtt ttggtagtgt ttgtgataga atggttttgc 1800
atatgattat tataggggat atatttatag agctctactt gtatactttg tgacttacat 1860
tatgaaaact tcaaagttct caatccatac agttagtatt tgtatccaga gtgtttaaga 1920
aaaaaatctg tcttatattt ttagtatata ggagccagtg ttgcttctat ttgttttgaa 1980
tacaaattcc agttttcttt gcatattaga tcccatatgt aagaacaac cttaaacaat 2040

aatttgtatg ctggtaatat ttggacaagt gccataaatt aatgtatatt gtactttctg 2100
aatagatttt ctctaatacat agcaaaattht atttcaaaac tgcaactctt tgaattattc 2160
cgctataata aaatttagtt ataaaatt 2188

<210> 243

<211> 2369

<212> DNA

<213> Homo sapiens

<400> 243

acagtcctga ggggtgcagc ggggtggcact ggaagggcct cctcagcagg ttgtcagcca 60
gctggaagag cctggggcca cctgtctggt cagagtctct ctgctgtggg cctcttggag 120
ccagggtctg ttttgtggtc tgactgaagt gacaatgaaa ttaataggat cctgatgctg 180
tgactgaggc catttcctg tgtctccaaa caggaatgag agaggaaatg tcattaggat 240
gccaggaggc ttttgaaatc ttcaagaggg accacgctga cagcgttacc atcgatgaca 300
acaaacagat tctgaaacag agattttctg aagccaaggc cctggggagaa agtataaatg 360
aagcaagaag taaaattggt cacctgaagg aagaaatcac ccagcggcat atacagcaag 420
tagccctagg aatctcgga aacatggccg tgcctctgat gccagaccag caggaggaga 480
agctgcatc acaactggag gaagaaaaga gaaggtataa aacaatgttc actgcctga 540
aagccctgaa ggtggagatc gagcacttgc agctgctcat ggacaaagcc aaggtgaagc 600
tacagaaaga gtttgaagtc tgggtgggcag aggaggccac caacctgcag gtaaattctc 660
cagcagtga ttcactgat cacacgaagt ccaagatcaa ggactggca gattcgatgt 720
ctgtgatgtg aatgccagga aaatcctgcc ctgccttgc ccagtcac acagccagaa 780
acagagcagc accagcacc cactggaaga cagcatcccc aagaggccag tgctgtccat 840
ccctctcacc ggagacagcc agacggactc ggacatcat gccttcatca aggccagaca 900
gagcattctg cagaagcaat gtttgggaag caattgaatt tccaggaaat atccatccat 960
gaattatgcc agcaagaatg aagcacagat gaaggcagcg cccctcactt gctctggctt 1020
cagaagtga ctatgggctg ctgggagcaa ctagtgactt tgattcccat ggaggggact 1080

gtgttttcttt aaggatgctg acctggaggc caccgagagg ctggggctgg ggctgaccac 1140
aacatccttc ctgtggttgc tggagctgct ggcagggcca ggcaaggcca gagtgctagg 1200
ggcagggatga aggcttcagc tcaactgttg agtgacgttt tgtgtagatc tttataagct 1260
tttgagaatg tgaaatagca ccatcaaaat ataatgtcag aggatgtcga caccagtggga 1320
atgtggggggg aatattttta tttttaacga tttgccagct ctctcccttg gcccatgctc 1380
tggttttgaa gccagaaat ggccatgaca ggtccaggca ggatgtcca gccacagaca 1440
aggcagtggga atgcagggca tcctgaaggc caatcctgat ctcccagact acatctttca 1500
ccatcagcct cttggccagg atgacctgga ggcagtgcct gaacagctgt gtctccaggg 1560
agccatctgc cctgcagggt ctaaggacat catagcacc agagaacagt gggcagctcc 1620
caggggctct gctgagagct tgagagaggg tagtgtgggt accttgggcc tcacaacctt 1680
caccagcca cttgggagga tttgggctga cactccccac ttccacaggg aaaaacatag 1740
ctgcctgggg gtcttgtctc catgggccct ctccatgaca gatccaaggg aaggtgggca 1800
gccctcaagg aggttcttga agaactgccc cctgggccag ggggtttcaa cccagctgca 1860
gccagggagg ggcagcggag ggtgagcagg agtggcacct ggaaatgaag ctaactggat 1920
aaaagtgtg gtccactgct cctggtgtct ctgtcctata aatacaggac ctgatgaccc 1980
tggaggggag cagagtggta atatagtata attggcttga tttcttttt cgttttttag 2040
gactgggtaa caggatcatg caggagaaga ttaaaccatt acatttctaa gctaggcagg 2100
cccatcgagc tcctctaate cacacccta ttttatataa ttagaaggcc agagtgaagg 2160
ggagattcag cttgctgttc tatgccactg acaaattgcc cctcttcagg gggcttcccc 2220
tgaccactcc atctcgagtc accccctagt tatcccctat ccattacca ttttttctgc 2280
atcactatct gacatgttat ccttccgaac ttgcctatth ttgaaatacc tgcaaccccc 2340
cataatacta agagctccaa tgcaacagg 2369

<210> 244

<211> 2861

<212> DNA

<213> Homo sapiens

<400> 244

tttcaactcc atggcaaggg tgaggaaagg gaagggactt ggtcaaggtc acacaggaag	60
tggcagagct gggaccacaca cccagatctg tctccctcta gactcactct cctgcccttt	120
gggaacaaat gaggcattgga aggtagaaga gaggcattgt ttggagctct gctggaaagt	180
tctggttgga gagaataaaa accgttcaac cttctgggag ctattgctgg tttggtttgg	240
gacatttggt cttcatcttt gcagtctcgg gtgcccacct cagctgtggg cctggtgaga	300
gtgcctcagt catcagtgtc ctcaggtgac ctgttgccca aggctgcact gggaggagag	360
actgggccga ggaggagtgt gtgtcccaca cagctgagat ggcctggagc agggcttctt	420
gctgccctct ctggcttctt ccggcaggca gcagtgtagt ccaggagtct ctgggccacc	480
aggtgttcgc tgccagactg ctcttcaagg acagttttta gggcatcatt ttccaagcag	540
tagcccctaa gcggtcccag tccaggccat ggtctctaga ctctccacc aagccattcc	600
cctacacaac agccaggggg cgccctgacc tcccagctct ccttggcctg agaccaccg	660
ggcactctgg tgcttggaaac agcaattctc acccaccttg aggtttatgg gcttttagcac	720
catcagcttc cctgccactc accctggcaa gctgcctggg agactagggg agagtgttg	780
ctgctgggta aactccccgc gtgatgtggc ctcacctgca tctccagcct tagctgccag	840
cattccatca ccgtgtttct ctttctgcat cctccaggag ggctcagtca cttcagttat	900
gggacatgct gcacagtttt atgcctgtca cttagcttaa gctgttcctt cagcctggaa	960
tgcccacctc ttctttctat gcctgcctaa cctcttctt tcatactgga cccaggtgtc	1020
acctccagga agcctttctc caccctatct tagtccgttc tggctgccat aacaaaatct	1080
catcaattgg gtatcttaga aacaacagaa atgtatttct cacagtcttg aagactggac	1140
agtccctgggt gcgggtgctg gtagagtcag tgtctgggta gggcctgagg tgcctttcca	1200
ctgtgtcccc acgtggtgga ggggtgaggg gtctccctca gggctctttt ataaggacac	1260
ggatcccatt catgagagct aatcacccca tggcctaata acctccaaa ggccccacct	1320
cctcatacca tcaccttgag ggttaagatt tcaacatatg aacttgggga cacagacttt	1380
cagagcatag caccaccaat ttcatctcat atccccccag gatcccccat ggcaccagcc	1440
acctcacctt gtgtcacagt tgactgccac ataacacttg cccagatct ggcttactgt	1500
acatctcagc acccagctca ggccccgggca cagggcaggc ctcagaggac gtgcgtagag	1560
ctgagggcac aaaggagcca agcaagtgtc cagagccctt ctctcccccc aggtactgga	1620
agttggacct tgctcaggtc tatgctagcg ggccaacgc atgggacacg gctgtgcacg	1680

acgcctctga ggagtacaag caccgcatgc acaatctctg ctgtgacaac tgccactcgc 1740
acgtggcatt ggccctgaat ctgatgcgct acaacaacag caccaactgg aatatggtga 1800
cgctctgctt cttctgcctg ctctacggga agtacgtcag cgttggggcc ttcgtgaaga 1860
cctggctgcc cttcatcctt ctcttgggca tcacctcac cgtcagcctg gtctttaacc 1920
tccggtgatg gctgctcggg ggccccacac ccaccagggt cccgaggaaa cagccgccat 1980
cccttttggg tccagatttt tttctctca ccccaaaagg cagggttggg cctgctgttg 2040
tggaccgggg gtcggggctg gcaggatgga aggactgagg accagcatga agtgggggtt 2100
tgttgtctcc ctgcctctca gaagcaccct gtccctcct cccaggcct gtgactccgg 2160
ccctggaagc ccctttgtt tttgttgaa aggctttggc ttcccgtgt agagctgctc 2220
ccgccaccac ctgctggggg cctgcctcag cccagtggc agtatgggga gaggaggaca 2280
tttgggctca cctgtcaagg tggccctggg accagagctg gtcccagcat ggggtgcacc 2340
gggtacactt aacgtgtctc tataagccaa gttgcttcag gaccttcacc actggcctct 2400
agaatggtcc agaggggctg gctgggtccc tttgtcagac tcctgccggc agctgccctg 2460
ggggacatgt gtgccatct ggcacctcc agcccggtgca gtccgctctt cactgttcca 2520
cggcctccca gtgcctccca gcattggacc catctcccc tgcagtttga ggccagagag 2580
gtgagtggac ctgacaagt ccagagtaac cgtgtagaca gagcagtgtg gacagcactc 2640
agccccagcc ccaggtgtgg acctcatgct ggtgatggct cccctgggtg gcctgccagc 2700
acagccagt ccatcaggga gctgaagggg ctgtcccca cctaactcca gctccccctt 2760
cacgttgtca ccaaggcct gtgccgccc cctcgcccc ctgctctgtg gattcctttg 2820
ggaagggtc cctgggcagg acaataaaga gttttgactc c 2861

<210> 245

<211> 2078

<212> DNA

<213> Homo sapiens

<400> 245

atggaaggcc ggccgaggtg cagcgagccc tctggtgccg gacgttgccg ggccgcgacg 60

cccgcagcca acgcaggcgc agcgctccga ttcggcgcggt ctcattgggtcc ggttcggggt 120
cgcgagtctc cgtctgggggt agggcagggt cttagactct gtgagtaaag acagcttcat 180
cttcccagtt catcatgggt tcaacatcca gataacaacg aacttgatgc aagtgatagg 240
tttgccaagg tcagacctct catcatccgg atgaactgca atttccagaa gcatgcaccc 300
ttggaagagt tctacagctt tggcgagtct atgtgtgagt actttgggca ccgggggtcc 360
aagcagctgc acagggggaa gcctgtgcga cttggctaca agatttgggtg tgggacaacc 420
agcagagggt acttggtgtg gtttgagccc tcacagggca cactgtttac caagccagac 480
aggagcttgg atctaggagg cagtatggta ataaaatttg tggatgcgct tcaggagcgt 540
ggttttctgc catatcacat attttttgac aaggttttca caagtgttaa actgatgtcc 600
attttgagga aaaaggggggt gaaagccaca ggaactgttc gtgagtacag gactgagcga 660
tgtcccctaa aagaccccaa agaactgaaa aaaatgaaga ggggttcatt tgattacaaa 720
gtcgatgaga gtgaggagat catcgtgtgc cgctggcacg atagcagcgt ggtcaacatt 780
tgctccaatg ctgtgggcat agagccagtg aggctgacca gtcgtcactc tggagcagct 840
aaaacgcgga ctcaggtcca ccagccatca ctggtgaagc tgtatcagga gaaggtgggt 900
ggcgttggtg ggatggatca gaatatgcc aagtacaagg tgaagatccg aggcatgaag 960
tggtactcaa gctttattgg ctatgtcatt gatgctgccc tcaacaatgc atggcagctg 1020
catagaatct gctgccaaga tgcccagggtg gacctccttg ctttccggag atacattgcc 1080
tgtgtgtatc tggagagcaa tgctgacaca acatctcaag ggaggcgaag caggcgggtg 1140
gagactgaga gccgcttcga tatgattggg cactggatta tccatcagga caagaggacc 1200
cggtgtgccc tctgccactc acagaccaac acccggtgtg agaagtgcc gaagggtgtc 1260
catgccaat gcttcaggga gtaccacatc cggtgacatc atgagacatg cttcttttgt 1320
ttataatgag atgtttacag ttaaatacag atggcagttg agcacttctg ttttgtgttg 1380
gaaaaaagac ctgaatttct aatgacttga ttttctattt tctccctacc cacaatacag 1440
ttatcttttt tattgtgttg tgttatgcct acatgtgata taaattaata tttatattca 1500
tttatattta ttttttgaa cttatttatt taaagttatg gatcactttt tattcaaata 1560
aaagttgtgc tttgggggtat atttgaatcc tagcaagaat aatcaaagga aaacttgcaa 1620
gaacagtaag aagactttac cattgcatgc catggtttat aatctaagat aggcaatagt 1680
gtataaatat catgtaaatg tgatggattt cttaatcata tttatttcat attaatecaa 1740
gtttatcaaa cttttgaggg ataatctgcc ttgtatttag tcagagggtc agaggtgcag 1800

atttcatatt ttcttaatga aaatatatttc ctaatacaca tatatcaatg tgagattcat 1860
 ttttgtaaaa aaaattattt ttttaatttt gtgggtacat agtaggagtg tatttttatg 1920
 ggttacatga gatattctga tacaacatg caatgtataa aaatcacatc agggtaaattg 1980
 gggatatccat cttgtcaaac acttgtcctt tgtgtttcaa acaatccaat tatactgtta 2040
 gttatttttaa aatgtgcaat taaattattt ttaactat 2078

<210> 246

<211> 2186

<212> DNA

<213> Homo sapiens

<400> 246

aggtttcaag gcactccaaa tatccatttg cagatactac aggaagagtg tttccaaatt 60
 gctcaataaa gagaagggtt caactctgtg agatgaacac acccatcaca aacagggttc 120
 tcagaattct tttgtctcgt ttttatgtga agatatttcc ttctccacca tgggtctcaa 180
 agcactccaa atgtccactt gcagattgta caaaaagagt gtttcaaaac tgctcaatca 240
 aaagaaatgt tcaactctgt gagatgaatg cacacgtcac aaggagggtt ctcagaatgc 300
 tgctgtctag tttttatgtg atgatgtttc tttttccacc ataggcctca aagatctcca 360
 agtgtccact tgcagattct acaaaaagag tgtttcaaaa ctgcatgtca aaggaagggt 420
 tcaactctgt gagttgaatg cacacattac agagagggtt ctgggaatgc ttctgtctag 480
 ttttaatgtg aagatattcc cgtttccaac gaagaccaca aagcagtcca aatatccact 540
 tgcagattct atgaaaagag tgtttcaaaa ctgctgttca actctgtgag ttgaatgcag 600
 acatcacaaa gaagtttctg agaatgcttc tgtctagttt ttatgtgaag ataattcctt 660
 ttccaccatg ggcctcaagt cgctccaaat atccacttgc agatcctaca agaagagtgt 720
 ttccaaactg ctccatcaga agaaaggctc aactctgtga gatgaatgta cacatcacgg 780
 ggaggtttct cagaatgctt ctgtctgggt tttgtgtgaa gatacttcct tttccaccaa 840
 atgcctcaaa gcgctccaaa tgtccacttg cagattctac aaaaagagtg tttaaatact 900
 tctcaaaaag gaagggttca gctctgtgag atgagtgcac acatcacaat gaacattctc 960

ggaatgcttc tgtctagctt ttatgtgaag atatttcctt ttccaccatg gtcacaaag 1020
tgctccaaat gtccacttgc agattctaca aaaagagtgt gttaaaactg ctctatcaaa 1080
gaaagggttca acacagggag ttgaatgcac aaatcacaag gaggttactc ggaatgcttg 1140
tgtctgattt ttatgtgaag attttacctt ttctatcaag ggcctcaaag cgctccaaat 1200
atcccccttc agattctata aaaagagtga ttaaatactt ctcaaaaaag agagggttcaa 1260
ctcagtgggt tgaatgcaga aatcacggag aggtttctca gaggcttctt ttctaggttt 1320
tgtgtgaaga tattttcttt tcctctatgg gcctcggaaa gctacaaatg tccactttcc 1380
tatactacag gaggagtgtg ttgaagctgc tcaatcaaaa gaaagggttca acacaggaag 1440
ttgaatgcac ccatcacagg gaagtttctc cgagtgttg tgtcttattt ttgtgtgggg 1500
atatttcctt ttccaccatg ggcctcgggtg tgctccaagt gtccagtgc agattctgag 1560
aagggtgttt cgaaactgct cggtcagagg agagtttcaa ctctgtgaga tgcatgcacg 1620
cgtcgcaggg aagttcctct gaggcttct gtcaagttt tgtgtgaata tatttccttt 1680
tattttattt tttatttatt ttattttatt attattatta tactttaagt ttaggggtac 1740
atgtgcacag tgtgcagggt agttacatat gtatacatgt gccatgctgg tgtgctgcac 1800
ccattaactc gtcatttagc attaggaata tctcctaag ctatccctcc cccctcacc 1860
caccaccaca cagtcaccag agtgtgacgt tccccttct gtgtcaatgt gttctcattg 1920
ttcaattccc acctatgagt gagaatatgc agtggttggt tttttgttct tgcgatagtt 1980
tactgagaat gatgatttcc aatttcaccc atgtccctaa aaaggacatg aactcatcat 2040
tttttatggc tgcatagtat ttcattggtgt atatgtacca tattttctta atgaagtctg 2100
tcattcttgg acatttgggt tggttccaaa tctttgctat tgtgaataga gccgcaataa 2160
acatacatgt gcatgtgtct tatagc 2186

<210> 247

<211> 2366

<212> DNA

<213> Homo sapiens

<400> 247

agtgacggag ctgagcctgc ccctgcaggt agctcatccc agagcattgg cgctggctcc 60
cttaccggga aatgaaatga gaagtcagtg catgacatgc tgggtggtgac agctatatctc 120
cttctgagtt catgtctccc tcttggaac aacccccgtc ttctgggtccg gtggccatcc 180
agctgcagag tgagcactcc acttcatgca ctgggatctc agctggagag aaggacatca 240
gggtgaccat atccaccacg ggccgggagc tgcagggcag aaggcaacca actctctccc 300
tccaacccaa ctgcacgtcc cccctcagat gtggggctcc cgccagcaaa gccagagaac 360
tctccttccc taaagcagac ctcaacatgt cactgtctcc tcttaaggaa aataataatg 420
atacttttta tttatttatt ttgagagagg gtctcaccct gttgcccagg ctggagtga 480
gtggcatgat aacagctcac tacagcctcg gcctcccggt ctctagtggc cctccacct 540
cagcctccca aggatctggg accacaggca tgtgccacca cacctggcta actttaaata 600
aatttttgta gagaaggagc ctctctatgt tgtccagggt ggtcttgaac tctgagctc 660
aagcaatcct cccggcttgg gctcccaaag tgctgggatt ataggcatga gccaccatgc 720
ctggccaata atggtgataa ctaattaggg ctcccagttc attctagcag cctctgacct 780
attttccatg aagaagagaa agctcttagg aagagaaatc atactgagtt actttcatgc 840
ttatgtttaa gccttcagtg atgcttgcac gaattttatt atgcttcata ataaagttgc 900
agcttttggt gttgttagag cctcgctttg ttgctcaggc tggagtgcag tgggtgcagtc 960
atagctcact gcctcctcac actcctggcc tccagcgatc ctcttgtctc agactcctgt 1020
gtagctggga ttacgggagt gagccccagt gcctggctcc tatttttttt tttttttttt 1080
gagatcctcc tcttgggctc aagcggttct cctgcctcag cctcccgagt agctgggatt 1140
acaggcgcac gccaccatgc ccagctaatt ttgtatttt tagtagagat ggggtttcaa 1200
caggttggcc aggctggtct tgaactcctg actaagcccc ccgtgcctcc caagtagctg 1260
cgattacagg gtcttgttct gtctcccagg ctggagtga cggtcgcaat catagctcac 1320
tgcagcctca gcctcccggt ctcgagcgcc tgtggtctca gctgcccag aggtgaggt 1380
gggaggatcg cttgggcccg gcagttcgag gctgcagtga gttgtggtca tgccactgca 1440
ctccagcctg ggcaacaggg agagaccctg tctctaaaaa aaacaaaat aaataaataa 1500
aataaaatat aaacaaaaca ggataagagc tggggtcatc aggtgtgacc tgggagacct 1560
atctcacctc agcacgatca tctggctctc agccccaca gccacatctg ccaagccatc 1620
cccttcaagg tcttcaccc catggatgga gcgtccaaac cactgaattc ctgagagcac 1680
ttgggtccct tctatccgct gagagcaaga aagaaattgc cactaagctg aggagaggct 1740

ggagtgcagt ggtgcaatcg cagctcacta cagcctcgaa ctcttgggct caagcgatcc 1800
 tcccacctcg gcctcccaag tagctgggac tacgggtctg ccttcaggtc aagaaagccc 1860
 ccagcccagt ccttggctcc tactgcccc acgactgcat ggccctgccc agggaaggag 1920
 atgagcgggt cagctacca ccgaccacc cccagagcc aactgcactc cctgcagccc 1980
 attgctccag cccagcacgc accctgctga ggtcagcact gatgccgtg gaggacagct 2040
 ccatgttgaa ggaagtcagg tcctgtttgc ttgtgcctgg ggaacaaagc agagaacaga 2100
 tggagtctcg ctcttgttgc ccaggctgga gtgcactggc acaatcttgg ctactgcaa 2160
 cctctgcctc ccgggttcca gcgattttca tgcctcagcc tccaagtag ctgcgattac 2220
 agggctctgt tctgtctccc aggctggagt acagtggcat gatcacagct cactgcaacc 2280
 tcgacctccc aggetcaagt catectctctg ccttagcctc ccaagtagct gggcctacag 2340
 tcatgcaccc ccatacctgg ccatt 2366

<210> 248

<211> 2520

<212> DNA

<213> Homo sapiens

<400> 248

attgagcagc aagaatgaga gcagagggggg aagcaaaggt ggcacattga ttataacaca 60
 cagctgaggt ctcgatacaca ctagatgtct ccagtcagcc gtgtggaaat cgatgtgctt 120
 cagaacagtc tattggatga cctggctcca ggatcaggga agtcagagcc cagacctcgg 180
 ttcacggtgc ttctcagat tctgggaatg ctgcaggaag ctgaacttca ggggccagct 240
 ggggttcaggc cccagacacc agggctcttg cagtcccatc atgagtcttg ttctgtcgcc 300
 caggctggag tacagtgggtg tgatctcggc tctgcaac gtctgcctcc caggttcaag 360
 cgattctccc acctcagcct cctgaataga tgggattaca ggcaccacc accacgccc 420
 gataatattt gtatttttag tagagatggg gtttcaacat attcaccagg ctggccttga 480
 actcctgacc taaggtgatc cacctacctc ggccctccaa agttctggga ctacaggagt 540
 gagccacat gccagccta tacttattcc ctgacttctc ccaactagta tgtaaacttc 600

aagctgacaa ggaatttgtc ttaaaacagt atctggcatg taagaagcac tcaattaata 660
ttcattcact gaatgaaaga agaaaggaaa .gagcatatga caagaaaaac aacaacaaca 720
acaacaaaaa ggataagcaa gacaatctac gtttataaca gaagaattga atctaggggt 780
gctcgttaag aattgtgatc aagcttaaat ttttcccaga aaaaaaaaag atgttttaat 840
agtacaagaa aatgaatacg acagattgca tcttgtaata agtaagttct aaagagagag 900
agtgttccat gtctgaaaat gtctagctga tagcatcatg ggcataatag tggatcttca 960
tctaagttta ttcagtcttt acccaacttg tcctggatgg ccaagagact agcaaagggtt 1020
ggatgcagggt ggaacatact ctgactcagg gatacttatt tcatgattag acagcagttt 1080
cctaatacatt gtccatccct tctcccatg cacacgattc agcccctagg gttatctctg 1140
gatacccatc acttggggtg ctgggcactc ttgtgtaaag agaaccagcc ctgagaaaag 1200
agaaatttcc ttcagcagtc tacaccttca tagatgaggg tagtagcaac aggagaaatc 1260
tattttacag attaaaatca gaagaaagga gagatttctg ctaagacaga ggagaacagt 1320
agactggcta tcaacaagat aaactataga aaagcgatca ctagcgtatg aaccatcccc 1380
caaggcactg taggtcaaaa cagatgatct aggaacctgc agatgaatcc ctctagaaca 1440
agaaaacaac attaataaaa gtttatattt attgaacttt ttgttaagtg gttacctaaa 1500
ccttttatgc atattgatga gtttaattct caccataacc ttaccgggta ggcattatta 1560
ttatctgaaa ggcagcgaga ttaagtaacc tgctcaaggc cacataatta ggaaatgaag 1620
gggtcttgag atgaaccag acaatctggc tttggagctc atcatccgtt tttttaaaac 1680
aaaacaaaac aaaacaaaaa aaacctgtt gtatacacta taatatgcat tttaaagtgt 1740
acaatttaat tatttttagc atatttgtga agttgtgcaa ccatcactac aattttagaa 1800
cattttcac actccaaaat aagctccata cccattgtca atcaccctcc atttttcttc 1860
agctcccaa acccaaggaa caactaacct actttctatc tctattgaat tagctcttct 1920
gaacctttca gatgaatggg attatacaat atgtggtcct tgattcatcc atgttgtagc 1980
atgtatcagc attccatttc ttttttatca aatgatactt ggttgtctgg atacaccaca 2040
ttttatttac ccattaatca gttgaagaac atttgcatg ttttcacatt ttctgttat 2100
aaataatgct tctgtgaaca ttcattgtaca ggctttcatt gcttttgtgt atacatctag 2160
gaatggaatt gctgggtcat acagtaactt ggtatttaac ctcttgagca acacatggtc 2220
ttaatcacta cacaggatat ttcacacagt ggatatgaag tcacaactgt ctctcaagat 2280
tttggggttg ttattgcctc ttacattcta aaaactttgt gtttttcttg ttttgaaatt 2340

caacatactg ttatttcagc ataaaatgga acttggctaa tttgaagctt gaggtcaaca 2400
cattttaatg aatctatgat atgtgccaag gactattata agatctatga tggatacagg 2460
gaaaaaaata tatttctatg aacagtcttt atagctttaa taaacctca ttgagcatcc 2520

<210> 249

<211> 2850

<212> DNA

<213> Homo sapiens

<400> 249

catatcatgg cgctgggcaa gctgcgtccg cccaccccg ccatgggcat cctggagccg 60
tacgtcctct ctgagctggc cgagggagga cctcctgtc cgggacgtcg ctgccggaag 120
tgccagggtt gagggcctca gctcctcctc ctccatcctc tctcctctgc cgcctcacia 180
gcatcactcc ttgaatcttc ttgcatccct tgtctgtctc attcctctac ctgctctgaa 240
tttctccat ctcttcagct tctttctttg gcccgaccgg aagaagggcc tttcatccag 300
gcctggtggc tcatgaccgc cccccaatc agccatgagt attatgaccg ggaggagttt 360
atggaggggc gcccgcagga ggcagaccgc ttggatgagc tggagtatga ggagggtggag 420
ctgtataaaa gcagccaccg ggacaagctg ggcctgatgg tttgctaccg cacggacgac 480
gaggaggacc tgggcattta tgtcggagag gtaaattcca acagcattgc agccaaagac 540
ggccggatcc gtgagggaga ccgcatcatc cagattaacg gtgtagacgt ccagaaccgg 600
gaagaggcgg tggccatcct gagccaggaa gagaacacca acatctccct gctggtggcc 660
cgacctgaga gtcagctggc gaaaagggtg aaggacagcg accgggatga cttcctggat 720
gactttggct ctgagaatga gggggagctg cgtgctcgta aactgaaatc acccctgcc 780
cagcagcccg gaaacgaaga ggagaagggg gctcccgatg ccggcccagg cctgagcaac 840
agccaggagc tggacagcgg ggtgggcccgg actgacgaga gcaccggaa cgaagagagc 900
tctgagcacg acctgctggg ggacgaaccc ccgagctcca ccaacacccc gggaagcctg 960
cgcaagtttg gcctgcaagg ggacgccctg cagagccggg acttccattt cagcatggac 1020
tctctgctgg ccgagggggc ggggctggga gggggcgacg tcccgggcct cacggatgag 1080

gagtatgagc gctaccgtga gctcctggag atcaagtgcc acctggagaa cggcaaccag 1140
ctgggcctcc tctttccccc ggccctccgga ggcaacagcg ccctggacgt caaccgcaac 1200
gagagcctgg gccacgagat ggccatgctg gaggaggagc taaggcacct ggaattcaag 1260
tgccgcaaca tactgcgggc gcagaagatg cagcagctgc gtgagcgtg catgaaggcc 1320
tggctgctgg aggaggagag cctctacgac ctggcggcca gcgagcccaa gaagcacgag 1380
ctgtccgaca tctccgagct gcccgagaag tcggacaagg acagcaccag cgcctacaac 1440
actggggaga gctgccgcag caccgctg cttgtggagc ccctgcccga gagccccctg 1500
cggcgggcca tggccggcaa ctccaacttg aaccggaccc ctcccggccc cgctgttgcc 1560
acccccgcca aggagctcc tccaccgggg agccccgcca agttccggtc cctctccgg 1620
gatcctgagg ccggccggag gcagcacgcg gaggagcgcg gccgccgcaa cccaagacg 1680
gggttgaccc tggagcgtgt gggccctgaa agcagccctt acctctcgcg gcgccaccgc 1740
ggccagggcc aggagggcga gcactaccac agctgcgtgc agctggcccc gacgcgaggc 1800
ctggaggagc tgggccacgg cccctgagc ttggccggtg gccctcgggt gggcggggtg 1860
gcggccgcgg ccactgaagc accgcgcagc gagtggaaag tgaaggcgcg cagcgacgga 1920
acccgctacg tggccaagcg gcccgctgca gatcggtgc tgaagccccg tgccctgaag 1980
atccgggagg agcgcagcgg tatgacgacc gacgacgacg cggtagcga gatgaagatg 2040
ggccgctact ggagcaagga ggagcggaag cagcacctga tccgggcccc tgagcagcgg 2100
aagcggcgcg agttcatgat gcagagccgg ctggagtgc tgcgggagca gcagaatggc 2160
gacagcaagc ccgagctcaa catcattgcc ctgagccacc gcaaaacat gaagaagcgg 2220
aacaagaaga tcctggacaa ctggatcacc atccaggaga tgctggcca cggcgcgcgc 2280
tccgccgatg gcaagcgggt ctacaacct cttctctcag tcaccaccgt gtgagctgcc 2340
cgggcgggta cacggcccag gccagggaa cccctgggg ccccgccct cactctccta 2400
tagagattgt gtgtgtgtgt gtgtgcgcgc gcgcgtgctc gctgtgcgca cgcacacatc 2460
tcgtctgggt gtgcgcacag ggctttgtta gcagagagaa gccctgagg agaaggacg 2520
cttttcttcc ttctgcccc gtaaagtgc catgccagt gccagcactg ggggcacacc 2580
tgtgatgggc accccttcag ctgtgcgtgt gcattccca tccccatgc tcttgctgt 2640
gcttgacagt gcacgcacac acacaccag tgctctctcc acccgaccg tgtacttgca 2700
gacagggaag ctgagctgaa aggagcaca gagagtgtcc ggcttcgctg ctgagcgcgg 2760
cctctccccg ccgctgcgca ctgcagttat ttgtagacaa aggcaccct gcattcgaag 2820

aataaagcaa gctgcctttg tacttggttg

2850

<210> 250

<211> 2297

<212> DNA

<213> Homo sapiens

<400> 250

tttgaactcc tgacctcaag tgatctacct gccttggcct tccaaagtgc tgagattaca 60
ggcctgaacc actgctccag gccataaata ctttttagat ttgttctgta actcagttat 120
gttacttgaa agcagtttga ttcttttttg taagatggta attattccca ccaactggacc 180
cttttgtgta ctctgagcat tgccccatta attatggcat tttccagtac acatccccac 240
actgcttgca ggaaaggacc tagagaaaag tcgcagggca gaaaagcaga ggaggacggc 300
cctggatttg gcttatcagt ccttggggcc ctctgcccc aggaagggca gcgaggacca 360
tggtgttgct gccatcatta tcacctggc catgagattg caggactggg gcgagaccag 420
aggaggactg gaagggccag agtcagccag gaacacagca gctcagctct cggctgttgg 480
caggtggcct tgatggcttt tcaaaggcaa tcactccacc caggacaaag ctacttttc 540
tctggggcaa aacacattgg ttcatttgtt cagttcatta attcaaccag tctgtttcta 600
agggaaacct ggctgtggcc agtcctgctc ccacatccct aggtgcccag tgttcccaag 660
ggacctgaat tccaaccca gttaggagtt caggggtcag catcccatg ccccatgc 720
ctgttaggga ggacagtga ggctgagcac tcttgggctc accaaacacc agcattgaga 780
aactgcccc catcttcct aggttaagtg acctttagg acagttcatg ctattgggat 840
ggctctgggta aggtggccac gagggcaggg gaccaaggtc tgccccacct ttgaccttag 900
cgacatgccc ctgattgcct ggccccctc tggttgtcgt ctgagtcct tctctggggg 960
tacctgggcc ttgctgcact tcctttgtat gctaacttca tcctgatcaa acttgatttt 1020
cctactgtga tttctttcca atttcttcat caagttaaaa attctgtatt gagagcagtt 1080
tcctacatta cctcaaacc tgttcaaaca aggattatcc ctagaagtca gaaaggaggg 1140
aaaacaagct tagtcacaga agactactct atacttgagc ttctgtttca agggaagtga 1200

gtaactgggtg gtggagccct gcccctctgc agtgtgtggt tttgtcctga tatattttta 1260
 gattgagatg taactcacct gtcataaaat gcccagactt atgatgtgtg gaaacaaaag 1320
 agttttccag tacagaaagt tacttagcct ctctgggtgct gtgtaagcaa caggtagtct 1380
 tcccacttca tttttgggtg ttttttcctt ggcttgggta atttccttgc atgctccttt 1440
 ctggagtttt ctgtatgcag ctttctgctc tctggtaccc tgtcttgtaa actctagcag 1500
 tccagatcta tctggactct aaacttcac ccatcaactt aaagtttgct gagatctgcc 1560
 tgggttcctg cttcatgcgc tgtattctgt aatctccctc aaggtagtac ctgggcaatc 1620
 agataactca tctattaata actgattccc tgtctctaag ggtttactgg ttttgttttc 1680
 tgatgtctag tatcttgaag accattcttt cctatatgtt gtccagtgtc tttggctttt 1740
 tcaagtgaga cagcaaatcc tattcttgtg accttatcat ggtcagaagt agacatttgt 1800
 atctatttta aaaataaatt tctcatatga ttatgatata atcaccccag ccctagtcta 1860
 taggttagca tttgagaatc attgctctaa gttgctctgg actacttctt tgttttttga 1920
 gacagagtct cattctgtca ccaggctgga gtgcagtggg gcgatctcag ctccctgcaa 1980
 cctctgcctc ccaggttcaa gtgacccctg tgcctcagac tcccagtag ttggaattat 2040
 aggcatgtca ccacagccag ctaattttat tttttttcaa ttttttgaga cagagtctca 2100
 ctccagcctg ggtgatagag cgacactcgg tctcaaaaaa caaaacaaaa caaaacaaaa 2160
 ttagagattg ggtctttccc aggcatatgg tattctataa aacagactta ctctccttgg 2220
 aggatatatt ttggagaatg cttcataaaa tctatgaata ctgtacaatg ctgataataa 2280
 aaacttttta tacctgt 2297

<210> 251

<211> 2035

<212> DNA

<213> Homo sapiens

<400> 251

gtttttagta gagacagggt ttcacatgt ttgtcaggcc ggtctcgaac tcctggcctc 60
 aggtgatcca ccgccacctt ggccctctta agtgctggga ttacaggtat gagccaccac 120

acccaacctt gttttgcttt ttgagacagg atctcactct atcaccgagg ctggaatgca 180
gtggcacaat cacagctcac tgcagccttg acttctccag ctccagtgat cctcccacct 240
cagcctcccc aggagctggg accataggtg tacaccacca tccctggtta attttttttt 300
aattttttgt agagatgggg tcttgccatg ttgcccgaagc tggatcatgaa ctctctgggct 360
caagcagccc ttccaccttg gctcccaaag tgctgggatt acaggtgtga gccaccgcac 420
ctggcctccc ctgctgttat aatgggggca gtctggcagc ccgaggggccc cacagtgacc 480
ctggcctctc cctgttgccc cttcaaaggt ctggtgctcc gtccgcacac ctgagagctc 540
ccacgaaggc ctcatcaccg atccccacag cccctctcgc ttccgggtca tcggctccct 600
ctccaattcc aaggagtctt cagaacactt ccgtgccc cctgggtcac ccatgaacct 660
gcctcacaag tgcgaagtct ggtaaggacg aagcggagag agccaagacg gaggagggga 720
aggggctgag gacgagacct ccatccagcc tccaggggcat tgctcagccc gcttggccac 780
ccggggccct gcttctcac actggcgggt ttccagccgg aaccgagccc atggtgttgg 840
ctctcaacgt gacctgcagt ctgatccct gtgaagagcc ggacatcca ggcacacgtg 900
tgcgccacct tcagcaggca ttccgggtgct gggctgggtg ctcatcaggc ctgggccccca 960
cactgacaag cgccagatac gccacaaata ccactgtgtc aaatgctttc aagatatatt 1020
tttggggaaa ctatttttta aacactgtgg aatacactgg aaatcttcag ggaaaaacac 1080
atttaaacac tttttttttt aaggaaagaa ttggtatatt tattatgttc tgtttttcta 1140
aataacctgt ggacaaggga agccccactg atttactccc tctcttcccc actccctgtg 1200
aggctgggct gaggcacgga tccctgggcc acagagcaag tctccaaatc agacagctgc 1260
ctcagcccct gggatgtgtg atttcagctc ctgtcacctc atgcaagggc gtggagacca 1320
gtagaggtgt ggaggccagg cagagagagg agcctgctct gcgggggggcc cagctcatgg 1380
gcaactgccc ttcagctagc ctgcctccgt cccctgagtc caacagtggg agccctagct 1440
gggaagtctt gatccccaaa gccacagcag gggactgatg gctatagcag aatgaggtcg 1500
ggtcaggacc ctcaaacacc atctgggaac accaagcacc ctgaatcgag actgcaggag 1560
ccctgcgggg tgagactgtg tcagagatac actgctggcc acaagtgtcc cctctcagtc 1620
ccaccttttc gggctgtccc atgtctatct cagggggccc ttacctctct gcagcagtc 1680
cccatcccag ccacaccagg gtctgtccgg ccaacctct tccccaggga aaggagaaga 1740
gagaaaacag gctgggcccgt gtggctcact cctgtaatcc cagcactttg ggaggttgag 1800
gtgggcggat cacctgaggt caggagtttg agaccagcct ggccaacgtg gtgaaacccc 1860

atctctacta aaaaaaatta caaaaattag ccgggagtgg tgggtgggcac ctgtaatccc 1920
agttactcgg gaggctgagg caagagaatc tcttgagctc aggaggcaga ggttgcaagtg 1980
agctgagatt gcgccactgc actccagcct gggtgacaga gggagactcc gtccc 2035

<210> 252

<211> 2295

<212> DNA

<213> Homo sapiens

<400> 252

agacttgctt caggttccaa cccggtaagg caaatggaga ggctgtcagg agaccagaag 60
tttacctcag ctatgcaccg acgcaccacg tgctctgggtg cacatccacc gcctcttctt 120
gcctcagttt ctccctttgt aaaacaacag cttgtaaagg cctggggatc ttctcatcca 180
cgggagtttt ctaaggatgc aggcgaaaga ggatctcact ctgttgccca ggctggaatg 240
tgggtggcatg atcacagctc actgcagcca cagattcctg ggctcaagca atcctcctgc 300
ttcagcctcc tgagtagctg ggactatagg caagcgctac tgtgtcagc tctcactctc 360
tggctgaatg tagaggactc tgaaggctta ggcaagaggg gagttataag gcaccacaga 420
accctgaatg actgcatgga gcagaaccct tcgcaaacct gctcttcagg cctccttttt 480
gagacagctg gaaaagattc tttctccttt tctagcaatt acttctccc tccgactcaa 540
atgcctactc agcctctagt attcagtggc tgctgcagtt tgcgggggtt tctccagac 600
catagatgcc tcagtttttg cagtacctgg aggtttcacc agtgaaagct ctgaaacagc 660
aaagatggca gcctgccctt tcctctggga gttccatcct aggggtgtac agaactgttg 720
ctggcctgaa tacacctgca tgaggtggct gaagactcca gttggattat ttatgaggat 780
ggcctgtgca aaaagacacc cagagatttc atgctgttga ttcacagaaa gcctgttctt 840
cttcaactcc tagagtctc agagtctgga tcatccctta cagaagatcc ttgataatat 900
ttctgatata cctccaaggt tccgtttgtc aaatgtgtgc gacccttctg ataagtcacc 960
agaggtgatg agggagagag agaaagaaag caaattacaa ctgtaaagag tctctgaaca 1020
gtgaaagatc aaaacagaca gtctctggct ttactggatg agtcaccatt gcagcccgac 1080

cgcaaaaaca agcgtggctt ctgtacttag cagcagtctt cctgtctgga aaggaaacat 1140
tgctcagatt ggagatactg gccattttat agacttcaaa gcaacttagg ccactgaact 1200
gtcaggcggg aaaacaggct gaagaaatgt caacaattgg gagttttgaa ggattccagg 1260
ctgtgtctct gaagcaagag ggagatgacc aaccctctga gactgaccac ctatcgatgg 1320
aggaagagga cccgatgcca agacagattt caaggcagtc aagtgtgacc gaatcaactc 1380
tttaccceaa tccttatcat cagccttata tctcacggaa gtactttgct acacggccgg 1440
gggccattga gactgccatg gaagacttga aaggtcacgt agctgagact tctggagaga 1500
ccattcaagg cttctggctc ttgacaaaga tagaccactg gaacaatgag aaggagagaa 1560
ttctactggc cacagacaag actctcttga tctgcaaata cgacttcac atgctgagtt 1620
gtgtgcagct gcagcggatt cctctgagcg ctgtctatcg catctgcctg ggcaagttca 1680
ccttccctgg gatgtccctg gacaagagac aaggagaagg ccttaggatc tactggggga 1740
gtccggagga gcagtctctt ctgtcccgt ggaacccatg gtccactgaa gttccttatg 1800
ctactttcac tgagcctcct atgaaataca ccagtgagaa attccttgaa atttgcaagt 1860
tgtctgggtt catgtctaag cttgttccag ctatccagaa tgcccacaag aattcaactg 1920
gatctggaag aggaaagaaa ctgatggtgt taactgaacc ctttttgatt gagacctaca 1980
cagggtgat gtcattcatt ggaaaccgca acaaacttgg ctattccctt gcccggtggga 2040
gtattggttt ttgagagtct ttttgggtacc ataagcatat catccacaga tatgtcactt 2100
tgaaaattcc agtttgaccc acgctatctt tggactgaaa caattaatta tttttaaatg 2160
acgctttatg atttagaaat ttagtatttc cgaaaattta aaagcttgat tggactgata 2220
gatacacact ttagacctca tacaagaata atcaaatttt cttaaaacta gaaaataaat 2280
gctgctgagc ctatc 2295

<210> 253

<211> 2073

<212> DNA

<213> Homo sapiens

<400> 253

agtgatgctg gagttctgct caggctgcc a gggctctggg cctgtagcct ggccctgaga 60
gtaccacctc ccttcagtgg aactttgtct aagatatacct tggggaagct gataccccat 120
ctcctgtgtc caggccctgc tgtgtccctg cagcactact gtgtcaactt cagctgggtc 180
aaccttgggg agcgctccga gcagcccctg tggattgaga accaatcgga ctgcacggcc 240
cacttccagt ttgccatcga ctgcttggag agtgtcttta ccatcaggcc tgcctttggg 300
acgctgggtg gcaaggcccg tatgaccctg cactgtgcct tccagcccac tcaccccatc 360
atctgctttc ggcgtgtggc ctgtctcacc caccaccaga caaatgfcac aggaccact 420
gttcttggac ctgatgggga cctgccactc ggacagcacc aagccagcca tcctgaagcc 480
tcagcacctc acctggtacc gcacacacct ggcccggggc ctgacgtctt acccccctga 540
catcctggat gccatgctga aggagaagaa gctggcacag gaccagaacg gggctctcat 600
gattcccatc caggatctgg aggacatgcc ggccccgcag tacccttata tccccccat 660
gaccgagttc ttcttcgacg gcaccagcga cataaccatc ttccccccgc ccatcagtgt 720
agagcctgtc gaggtagact tcggtgcctg cccagggcct gagggcccca accctgtacc 780
cctgtgcctg atgaaccaca ccaagggcaa gatcatggtg gtctggacgc gaaggtctga 840
ctgccccctc tgggtgactc cagagagctg cgacgtgccc cactcaagt ccatggccat 900
gcgcctgcac ttccagccgc ctcaccccaa ctgcctttac acggtggagc tcgaagcctt 960
cgccatctat aaggtgtgtg cagcgaatga gagggaggaa tgcggggtct ctgctaggag 1020
cctgagtggc ttggtggggt ggcaggaagt gaccgagggc agcttcaggc tccatcctct 1080
gcgtgccagg ctttctcttg gctggacagt gaccctatg agtttgtctc ctccaaagct 1140
cctggcctag ctcgcccat ctgattttct cattcttatg taagtctccc ctcccctcca 1200
agggagaact cagctgagat caagctgttt gggaaaactg ggtgcacagg gagatactcc 1260
ctggggctcc tggctaggag gcctcctagc ttctctacta gtccttgaat taagaagtgg 1320
tcactctaaa ggagctttga gcgggcagga agctgggcct agagacaaag tcagcagcac 1380
cagataattg tgatggaaag ggcttctgac tcagcttccc tgggtcggga actccgagtg 1440
ccggctgtcc ccagccctgc tgttctggcc ccagatgcgt ggtgccccct cctcatccgt 1500
tagtctgcc catcccttcc ttcttgactc tgcccacccc actgcccttg cccagaggcc 1560
aaggtcttgg ggcccagaga aaagtagggc tgtgcggtca agatcagggt cacttaccag 1620
ctatgtgacc ttgggcaagt tccttaatgt ctctgagtcc tgatcttttc atctctaaac 1680
ttgggaccac gtccgatctt ttgaggaggc tttccaaagt ggaggctttg gttgcccccg 1740

tcctaagtct ctggcagtgg ggtgatgttg aggtttgtag gaataagggt gtagatgcct 1800
ggctctgctg aggttcagcc tgtcagatat ttaggttaca ggctctagac ctgcacagtc 1860
cagtacagcc actgacagcc acacgtggct actgagcttt taatatgtgg ctgggtcccaa 1920
ttgagacgtg ccgtgagtgt aaaatgcacc ctggatttca agacttagta tgaaaagaat 1980
gtaaaaatacc tcgttactaa ttttatattg gttatatgtt aaagtataa gatttttagat 2040
ctgttgggtt aaataaaata tactattaac att 2073

<210> 254

<211> 2190

<212> DNA

<213> Homo sapiens

<400> 254

gtccagttcg gaggcaaggg ctcccgtcc ccttcccaga cagcgggtgt cgcgctttcg 60
ctgggggatga ggccacgcc ggagcagggc ggctccggcc ctttctctct cccgcctct 120
gtcctctgac tcccgtccct ctctctccct gccccagaga tgctaggtcc tgctctccct 180
ccgagaggac acggtcagg gctgggtcca gtctctcccc accctacccc aggttctct 240
tcctgcaaac taaatttaga ggtgaggatg tggccgcctg cacggggcgg gcggggaggg 300
tcagcggcga tgccgccgga tgtctgccag ccgggccggg acgtgcgtc aggtcggtaa 360
acacgcggcg tgctccggag gggccgcgcc agctgcgacg gggacgccgc caccctgggc 420
accctggact gacgtggcgc cgcaaccgc ccggcgggtc tgccccaggc caccacac 480
acagtctct atccactacg gaaagggatg gctgcagtgg ctctcacgcc ttactggtgg 540
aacccttct taaaaagctg ctatgggggt cagggtgtag caggattaa actgggggtc 600
ccctcaccc caggctccct ggagcaccac ctctgaaaac caggggacca gataagctcc 660
agcgttggga agccaggata ggggaacagc gctcgggtcc agcagggccg tcccagccag 720
ctacctgct tccctgctcc cagagccatg catggccgc ttgtctcac cgctccttg 780
tgaccgtcaa ataaggcct ccatggatgt cacaagactg tcaacatctt caagggcctc 840
gtgcatgaaa ataattgtc aagtgcagaa gctacatcat gagcagactg tctttggaac 900

aagctgtgga atggaccgtg gaatgaatgc aggcagccac tctgcctcca agatcagcac 960
agaaagaacc cccagctccc tgcacctggt ctcagagact ttgaactcaa acagacatcg 1020
cacatggaat gacacgcaag taagcagggg ccacgtgagt cccctgcatt ctgaccctca 1080
cagctaatacc cacggtcctg tccctcctca ggccctgtcc cagataagcc tgtcaatccc 1140
caatgcctcc aggaagccag aggagccccc tacacagccc acagagggca gagaaatgag 1200
tccgtcctgt ggccctgata tcatcccatg gagccagcac accctgtggt ccaactgaaa 1260
gggagagaga gaacatagcc aggacaccta ctgtgtgcta aatgcctgct ggggagtgagg 1320
ggcactaagg ggcaacttgt tttctgttgg tttgtgtcat cgtttccttt cccttctggg 1380
ttttgttttg ttttgtttta atgtatgaga aactgcctta ctgaggaagg agaatcgctt 1440
aaatggtact cgggtgcctgc cctgtccttc tctgccttg gggaaagaaa gaaagaaata 1500
acatccgctc cttgatctgt atgcacagga gaaacagaac accctgtact ttctgagcag 1560
ataaaggaga gaagaaagtg ctggctcagc caggcaggga agaggaggag ggcgggcaac 1620
agacacttgc cttcttgctc ctgcttccat ggcaaagtgg ggggtgtgagc ctcttgccca 1680
gcgcttgcac ccacgccttg aggttattct ccatgtcccc aagcaggcaa tgcctaggag 1740
tgccaagaaa tcaggccagc cagggcataga gtgcaccccc cggctcccctg gcaatttcat 1800
ccaagatacc acgcagccag ttctccagcc tgcaggccac cgcctcccc agctgtccag 1860
agccaccacc accctgactg aagtgtccca agaggccaca ttggacacag gaaggcagca 1920
gggtatggag agaggaaaaa agggaggaaa aaccccgtcc tgtggcaggg ttgccaaga 1980
cggatgaata gaataaagac tcagaggtca ggtgaccaga gtgggcacga gccccaaag 2040
tttgtgtgaa ctgccacttt ttcatcccat ccctggaaca tcctcccaa tttcattttg 2100
acaccctcag aaatttacgc tctagttgca gtgagctgag atggcatcat ggtgtctcag 2160
cctgggcaac agagtgagac cctgtctcag 2190

<210> 255

<211> 2491

<212> DNA

<213> Homo sapiens

<400> 255

tgttccaggc	cccttcccca	gctcacatcc	ctgccgctca	gtgtccccat	gctctccctc	60
tctgtcgctg	ccccctctg	ggtcagctct	gccctctgga	acccacaga	gcaaggctag	120
accaatgggt	ttcagactcg	aagacaaaaa	ttatgtttat	ctcaagtttt	ctcctctgtc	180
tgactttctc	ctgctccctg	aaagcccttt	ctgtgacctg	gtttctgctt	cccatcctgg	240
ccatttcttt	gtgaatagga	ttcaatttgt	ccaggaaccc	ttcaaaggga	tcccacagtt	300
cagagagagg	aagggaacaa	tctgacctag	gcatacagct	caatgctcac	ctcgccagtc	360
tggatgttaa	actgctgccc	aaccaggaga	gatcatttac	tgcctccttt	ggtctccgag	420
attccctcca	gtcctgatct	tctctagagt	cagttattgg	cacctttgcc	accacacctt	480
ggaccatgcc	cacgtcagac	atgaccagtc	aatcacagca	ctttctccct	gagcccagac	540
acgatctcag	aaacctcaaa	aggacactca	agcagcccct	atcatcagtt	gcagttggca	600
caagaagtga	agctattcat	catcctgggtg	acccaatgac	cagcatgggg	agtggcctct	660
gcctggctgc	aggtgctaac	caatccttct	ctgcctctca	ggtttgctac	cggttttgcc	720
tactatagtt	tggctatggg	tgtggaagaa	tttgagtgca	acctctacat	cctccagatc	780
atctttgggtg	gggtcgatgt	cccagccaag	ttcatcacca	tcctctcctt	aagctacctg	840
ggccggcata	ccactcaggc	cgctgccctg	ctcctggcag	gagggggccat	cttggctctc	900
acctttgtgc	ccttgggtga	gagactgggg	ctaccccaga	accctctgga	agaggctgcc	960
aggttgggtg	ccagggactt	cactgctggc	tctgcctcta	agtcactgtg	ttaccttgag	1020
caggctccctg	cactctctgg	ggctcagggt	ctctcttcta	gaaaataacg	caattgggct	1080
agatgacatg	aaagctcctt	tccagatctg	acttggactg	ggcaaaaagt	atgggtggtat	1140
ctggatagtg	tgaaaatttt	tgaggtattg	agagtgtcct	gagtgacatc	actgtagaga	1200
taagctgaga	tggtaaaacg	acagagctca	tgctcaagaa	agaccacaca	acctactcca	1260
tcattacctt	ggaaaagcta	cgtttatttt	atatgggtgt	tagttggttg	ataacaccta	1320
tacccttcca	aaagaacttg	aggtatttta	agacaagaac	aagaacatat	acaacaaaat	1380
ataaatggaa	atagaggatc	agaggcaggg	gaaaacacaa	acatagcagg	acacaggcat	1440
gcaaagcatt	actcagcttt	aagtttggat	ctgagcttct	tggaagccaa	agcaaaaagg	1500
gagacaagat	cagctaagga	gtgagaactc	ttaggtgctc	ctgaactcca	aggcccacca	1560
cattttcttc	cctctgcaga	cttgcagacc	gtgaggacag	tattggctgt	gtttgggaag	1620
ggatgcctat	ccagctcctt	cagctgcctc	ttcctctaca	caagtgaatt	atacccacaa	1680

gtcacacaggc aaacaggtat gggcgtaagt aacctgtgga cccgcgtggg aagcatgggtg 1740
 tccccgctgg tgaaaatcac ggggtgaggta cagcccttca tcccgaatat catctacggg 1800
 atcacgccc tcctcggggg cagtgtgcc ctcttcctgc ctgagaccct gaatcagccc 1860
 ttgccagaga ctatcgaaga cctggaaaac tggtcagtca ctgcctctgg ccccatcagt 1920
 gctcctccct ggggaagcag gtctgggccc agggcttttc cttagctctc tgtccctagg 1980
 tccctgcggg caaagaagcc aaagcaggag ccagagggtg aaaaggcctc ccagaggatc 2040
 cctctacagc ctcacggacc aggccctgggc tccagctgag gacaacggag ccccttttc 2100
 ctgcccctca gagactgac ctagccaggc accttaggag tataggaggg ccccatatag 2160
 gtccatcctc ctaggatgaa gccttctgag agcttgggtga aggtgtctcc atcaccacca 2220
 ccagagcctc ctgcccagcc ctggccagtt caaagggttca gccatccctg cccttgttct 2280
 ccctgcaacc caggccctgc cattcttctg tctagccctt cccactggc caccttcccc 2340
 cactgtcccg gtcccttcc cctgaggtcc cctgatatcc cctggctcag tcctaacaag 2400
 actgagtctt aacaagatga gaagtcctcc ccttcttgcc tcccacactt ttctttgatg 2460
 ggagggttca ataaacagcg ataagaactc t 2491

<210> 256

<211> 2353

<212> DNA

<213> Homo sapiens

<400> 256

atatcagcac ctggatcttg cctcctgagt cagtaaggat atgccacagt cacgaaggca 60
 gtgggatttc gagggaggga aggggaaggcg gcaggcgggg catgccctcc ggggtgccc 120
 aacacacctg ctgcatccac atgtcttcag agccctctcc ctgtgggagg cttttttcag 180
 gacagccttg gtgaactgga aacggaatcc cagcccttgg tggccctgca gtgacttgga 240
 cctttccgag gtcacctgc cactgcgtgc ccttcagtcc ctctggcag gtgggggcac 300
 atccccagc cgctccatt tcctgacatt gtcactttgt ataactggaa gccttctgtg 360
 aaattttagt tttcaaagca ttatctggtg atgggcaacc cagggcagcg aatcattcag 420

aattttctta tctaggctaa taaacataat aaaatcaata aggactttga aagtaactcc 480
actgggttca ggaaactgag tgtggccgcc ctgtggggtg gtgtttggtg agtgcttccc 540
ggaggtgagt agttaattca caggagtgac taatggcagc gtcccactca ctctctcttc 600
cggggtcatg gtctcaaggg gtcactccat gcactgggga tgtcagctca ttacagaatg 660
atatattcgg gaagtgtctc agttctgagt gcctttgagg gaatttgacac ttccgttccc 720
acacagcctt gcatttgttg tgtagaggc tgtgggcctt gggcaggagg ggtgagtgtt 780
ggcacatacc tcccgctctc cccagccttc tctgactctg actttccctc ttgaaggcta 840
ccggctctct gaccagttcc acgacatcct cattcgaaag ttgacaggc agggacgggg 900
gcagatcgcc ttcgacgact tcatccaggg ctgcatcgtc ctgcaggatga cggaatggct 960
tcacgtgggt ttgtggtggt ggtgggaggg gcttgcttgc cagcgtgatg cacctgacct 1020
tcaatctaag gagctgggca tgtgtagaat tagtttttgg agcttataaa agtgagtctc 1080
atctttggag aagtagccgg ttagtgaagt gtggacaaac atgttttctc ccccttgga 1140
atggcacaga gcagcccatc tgcaagacgt ggtttttcag tatccggtgg gttatttaca 1200
tgtatgttct ggtgttgttg tttttttgt tttttgttt gttttgttt gttttgagac 1260
cgagtctcgc tctgtcacc gggcgggagt gcagtggcgc gatcccggt cactcccacc 1320
tctgcgtccc gggtttaggc ggttctcctg cctcagcctc cccagtagct gggattacag 1380
gtgacacca gctaattttt gtatttttag tagagacggg attttgccat gttggccagg 1440
ctgatctcaa actcctgacc tcaagtaatc cgcccactt agcctcccaa agtgctagga 1500
ttacagacat gagccaccat gcctggccaa ctatggtgta tttttacaaa aacttttatt 1560
ctgagaaaat gggcacgttt tctgttgttg tcatcactgt gtcctgccgt ctgtgtgtga 1620
ggtcagctgt ggagcctgtg gtcgctcagg ccgccctcag tggggtctcc gagctcttcc 1680
cgtgcactcc agtgtctgca ggagctggta atgcaccctg acctgcaagg caagctcctt 1740
ggtggtgtct ctctgtctgg gctctctttg agaccacagg gagatggaga gcagggtca 1800
ggggaccgc ctgggagctc cacacagacc tctgctgctg tttgcagggtg gtgatccagg 1860
tctctacca ggttctcaa ggtcctgtct tgttggcctt ggaattcagt gagagatagg 1920
aacagcatgg ggtttttaga aataatgtgg aaatttgga aacgttcca aattgtttat 1980
tctgtataat aattaagatg ctagatctgt aaaagtgagt ttcctctgat ttggcatgga 2040
tgcatcagtc cctgttcttc agggatttgt tggagaacca ggtctgtgaa catggaagct 2100
tcaaaactct acggttgggg accctttcct gccctgcct ctcgggggttc ctgccaggtt 2160

ggatgacatt tttaaatgt tctctgaaca ctttcaaaaa agtgtaggct gggcctgggtg 2220
tcgcatgcct gtagtcccag ctactcagga ggctgaggcg ggagaatcgc ttgagcccgg 2280
gaggtggagg tttcagttag ccgagatcgc gccactgcac tccagcctgg gtgacagagc 2340
cagaccctgt ctt 2353

<210> 257

<211> 2013

<212> DNA

<213> Homo sapiens

<400> 257

gtttgtagcg ccccatgatt tgtaatggaa aacaaaattg ggaacaatag aaatgtccat 60
ctttgagagg aagaaactct gtgatcacat gtggagaatg cccaagtggg gaatacgaat 120
gaaccagagt gagacctagt agcccgaacg agcccagatg tcatgctgag tgagcacagg 180
aagatgcggg acacatagaa ggacagcgtg tatgtgttca aaggcatgca gagtgcgcac 240
atatgctatt caaggatgcg tgtggatgga gcagaaatgt taacacacat gggaataaca 300
aatcactacg tccgagacag cgattttggg gagcacacag ggaggggact tcatctggga 360
ggaacgcatt attaggctgc tgtgacagggt gtgtgggcgt ggaccatctc tgtacctttg 420
tgtatgtctg gaatattgca taataagtaa tagcttaaga aagagagaga gacagccagg 480
gtgtgtggct gtggtgtgtg ttgggcttat ttttaattct cccataccag gaaaggcggg 540
ctggggagag agcggcgagc tgggtgtgtac taagccgatc ccttgccagc ccacacactt 600
ctggaacgat gagaacggca acaagtacag gaaggcgtat ttctccaaat tcccaggat 660
ctgggctcat ggcgactact gcagaatcaa cccaagacc gggggcatcg tcatgcttgg 720
ccggagtgc ggcaccctca accccaacgg ggtgcggttc ggcagctcgg aaatctataa 780
cattgtatac gctcaacggc aagaaagtgg aagttgccgt caaacagatc atcgctggaa 840
aagccgtgga gcaaggaggt gctttctcga accccgagac cctggatctg taccgggaca 900
tccctgagct gcagggcttc tgagtcagac tggctggcgt gtcactcagc cgcacccgtg 960
tgcactgtaa cttttgtgtg ctcaagaaat tatacagaaa cctacagctg ttgtaaaagg 1020

atgctcgac caagtgttct gtaggccttg ggagggatcg tttctctgtt ttgttaaate 1080
 tgggtgggtac ctggatcttc cacacgagtg ggattctggc cttcagagac caggagggag 1140
 tgtctgggcc gcaggtgtgg cactgtgggtg agagtgtgtg tctttgcaca cacagtgcag 1200
 tgggaacggt ggggctggct ggtgctgaag acagacacac tcctgagcca aggtcttgtc 1260
 ttcaacctcc ccgtcccggt gtccattttt gctctgtgaa ggtgcaaate cttttcttcc 1320
 cttcccatct caggctctcc tgttttccct cagggtccag tatgcctttg agcttttagct 1380
 gttagaaagg aacccccgtg acttgacaca gctttcacag ctggctgcta ggaccggcgg 1440
 gctgggtgtt cacgtgtgtc tgtgtcatgg atgcaatgca ggccctggag gactgtgcgt 1500
 caccgtcaa ccagagcgtg cctccgggcc agcttccctc caaggaatga gtggatttca 1560
 tacaggatct ctttattgca cagactgaat ggctttacat gtttctaata tgaattagge 1620
 atgtgaagca gtgggtgtcc acccgtgtcc ctcatgggtg agccctccag ctgtgagccc 1680
 aggcagtgtg gtcaccgagt gaggaccctc ctcaccagga accgcatccc tgtgtgcct 1740
 ccacctgaga gttgctaggg ggttcttgtc gagatcatgt catcagcacc cctaagtcaa 1800
 gtcacgggtt tccatagcca ggcagttggg atgtacaatt cagttcagcg tatgaacttg 1860
 tatctctaata ctgatgtcca tttttatatt ttttgaaact gagcacaatg aaatcctttc 1920
 ttgaatcatt ttccttttgg attataaaaa tatgggggaa agtgctatga tgaattttat 1980
 gcaataaatg tatacatgtg tgcacatgca ccc 2013

<210> 258

<211> 2656

<212> DNA

<213> Homo sapiens

<400> 258

tagtactata aatgtaattg tttttgagtg aagcaccatg taatccatgt ctcaatccca 60
 tgcccgtcc actgacacta gtcgaattcc actgagaaca gaagcaagaa taatagtagt 120
 ttatttgcat tgtttaaatg aattctatgc aaaatcatat ttcaaatttt catcaagtga 180
 ttccatatgg tacatggcta cacattaagc atttaccttg ctattggcag agatatgaaa 240

cttaagctaa ggaatgtatc catcccaaag caggaaagca gaagtgtgtt ttgcatactt 300
caggatttgt ttttcctcca ctaatatata gaggccttttg cagaaaactt gcatcagtat 360
tcctgtttct gcacgtaggt gactatataa atgcctgtat gtttttttta aaatatctcc 420
tcagagattt tcctagggaa ttataaaatt acatatattt tattgttagt tagatgttta 480
ttcttggatt cttaccatta gaatttaagt gttatttaaa actctgatac agttacagac 540
actttacatt ttattatgag gtgttgattt tagtggtatt tctcctcagc aaagcattcc 600
taataatggc taatacacca tcaaatgaaa aactgctgat gagagtgtaa gagaaagcgc 660
taacgtttcc actagatggc gcaatatatt atttatccaa aactcctccc ttgcatctga 720
gtttttatgt tatgtgtaca gtctgcatta gcttagaatg gaatttcatt ctcaggtaaa 780
ttttcgaatc catcaccaga tctaagcatt ctgcttcaac aataccctct ctattcctct 840
cattcccatt ttaaatecat aggtggcttg ccctgcggca gtaaaatctt ccccttgata 900
ttgattcttt ttctgctcat tcattctgat gttctttttc tgcacccctga gatacatgtc 960
gttaatttta ataagaatcc tattgacttc ctcacgggag tctgttctcc tatggttgat 1020
aaagctttta atactattta aagtggttct ggtctgtact tactagcact tccctgaaca 1080
gtctcaaaat agcctaaaca taagaaaaca atcctgcaaa gtaaagggtt ttacaagcag 1140
agatgaagga aaggagcag cagctgacca tcagatgtgg tatcaggtag ctggaagagg 1200
atccaggacc catcaggga gcaacgactg tacttagcaa tttgggttat aattacaaaa 1260
aaagaaaaaa tagtagaaag gatctttacc agacagtaag gtcatggtac aaatcaggtg 1320
agtgaatgtt ggtcagaggt agcctgacac tctgatgagg acttcaagat gagaatgaga 1380
aaaatgtcta ttaaatacac tacatttgat aatatctcag atttagaatc tcttttggga 1440
ttcagatagt ctgattattc caattcaagt gttcagttaa gtttttagtta ctattcctat 1500
aataccaat tctaataat catatctcct gtggaatatt cattggtgcg atggcctcat 1560
cccctttttt actttttatt gacatggtgg ttataaaatg aagagactta ctctattgga 1620
attttcatct acgtagtatt tgggctgtca agactaaata gcaaaagggt agaataattag 1680
atcattctct taataagacc tgatttattc cttaggatgt tatacaaacc tttttatttc 1740
aggcctactt tcttgttttt tctaaaagg atctaggata gaggagaaca taatatgcct 1800
gtatacttct cccatggttt attcataagc tgcttcatct cattggagat ggtcattgag 1860
gagagcagta ataagtgcg atgattctga ggacttggct agactgagcg gatcaatggc 1920
acacaccagc actggttagag gctgaccaga agctcatcga ttccatatgc tgtcaccag 1980

ggtgcagatt tactctcttt tgctgttatt ttattgtttt tcttaaatta agccattgtt 2040
tttcatggat tattttttaa atacctaccc cataattttc aggcaattgt aaaaataaac 2100
cttatttaag ataactttta atggtacata tcaactatat gtggggaaaa aatgcaattt 2160
tctgggcaag agaaaccaa ggattttcaa tatatgagat gccaggttgt caattttcta 2220
aaccttttcc tctagattat tctggcccta ggcctttcag caacccact aatcaattat 2280
tagatcctgc cccaaggagc agtggcttgg gggctggatt tagggaggaa aacctgatta 2340
aactgttttg cttagtactg gttacagctg tagctggaga agagtttata atcataaagt 2400
acatttttgt tattaccttg tggattttta ttatccatct tgtctaactt tgttctctgt 2460
catcctagat aatgaggtgt ttgtgggagc agagctctgc acacaccagg ggatgtaata 2520
aatgtttgca cttggcccag tatattatga atgtggcaca gtaaataaag tttgtgtaca 2580
aaatactagt ttatttctat gggagccatt atgttcagga tatataaaat gtatctaatt 2640
aaacaatttt gaatct 2656

<210> 259

<211> 2869

<212> DNA

<213> Homo sapiens

<400> 259

gtggtgcaat tcagcagaca ggggctgagt gcccgtgcc cacaggatgt gcaataaagc 60
tggggaaaca gtgcagcaca cacgggggca accgttcctt ctgatggtcg cggagctcac 120
acccggggga ggtcttacc ctgcagcaag ggcacggctg gatttttagga atatggctct 180
cttagcgtgg gattctcggg ctgtggagat tccagtgggt ggaaggccag gccatctca 240
cggtttaggg tccaggaagc ccaggttcca taccatggaa aggcagcccc cggcttgggc 300
tggtcgtggg ctttctcacc tccttctgag ttcagctggg ctgaggaggg ctgagctgcc 360
aggagctgga gtagccaatg aagacaacaa gcaaatgtaa gtaccagtga agctctcatc 420
tcccgtgtg accgtgtgtg ctagaggctg accaggaagg cagctgctgg tggggcaggt 480
ggaccagcaa aggcgtgggg ggtgccttac tactaaggga gcctggaaca agaggcttct 540

gcagtttttag ggacccttg caagagaagg gctggggagg agaaagtgct aggcgtggac 600
aataactgat gcctgaggaa gagtgggaga aaggattccc ctccccagt aaggagatct 660
cagcagaaaa atctgagcct ggcctctgct gaaggcccca gatagaggct ccagatggag 720
gcacctgggc taggagccag ctctgcatag aagcacagcc ctctggggta gggggtgggc 780
aggggccaag gtccttggt gtagctgcct ccagagcctc cacacactgg ctgaaccaag 840
catggcctgg ggagggccac cccagagcc ttggaattgc ctgtggcccg gcctggaaga 900
tcacagaggg gatttagcca gcagccaatg gctcctttat agtggctaga gtggatatga 960
ttatatcccc aaaagtaaag aagttaaatt agtaaagtta acattgatgt gaaatatgaa 1020
tgttcagaat acaatat tttgtttttga ggatagtga ccaaattcag tgtatgtgaa 1080
taggtatgca tacatatcca attatacata tggtataaat attaatttg tctatgatat 1140
agtatattta taacatataa atatgatatg taatatataa gatttataac ccatatTTTT 1200
ctagaaaaca tatatttata atatataata tattaatata gagtacatat ttatatgtga 1260
tataaatata taaacaatat gaatatgtat ttatatata taatatatag tatacataat 1320
atgtatatgt atgcatacct actcacatac actgaatttg gtctgaatac actgaatatt 1380
taccaatatt ttatatataa gatacatatt ttgcaggcta tagatacata tagactgcaa 1440
aaatactatt gcagtctata ctaaatacta tagatataga gagactgcaa aaatactata 1500
gctctaatac tatagatatg tctatactaa atactatgta tatatttata tacatatgga 1560
ttgtaaaaac actattgaaa aagaaccctt gcctctgact cttgtttcct ttcctTTTT 1620
cctactacct gccccacact caaccttgag taactcaca gtcacaagt ttgcaaaaac 1680
ggttctccat ggtaacttcc tgacagttac caggttggga ttaagccaga acaatatcta 1740
cacgttccaa ccacgggtat agctgatggt gaagatgaaa cctgctccct ggatgaaacc 1800
tgctccctca atgaaaccac aaggacacct gctgctcact tcaccacgtg ccctgcttct 1860
gctcagagcg tcaacttggtc ttcaggtgct cccaaggga catctccagg gaaggctttc 1920
aaactttgtt tgagtcatag aaaccatttc cttttgatgc tatgaaataa aagtatgggg 1980
acctgaaaga ggaaatagct gaagacataa ttaagtctt ctcagaggat atgctatcta 2040
agctgaggcc taaaggttga gtaggcatca aggaggcaaa cagtgggagg gaaataactg 2100
gaggtttagg gaaccttggt tcactgacat attaaatttt acacaatggc ctcaccatgg 2160
aactaccccc caaataaaca tactcaacac ttccagcacc ccaagacat ggaggtgtcc 2220
ctcccagaac tttccactc caaaagtatt ctcagccttt tgtcccatag atttccttta 2280

cttgtttttc ttaaaattaa cataaattga ttatgcagta tgcacacttt tttggctgac 2340
 tcttgtcact caatattgtg actgcacgtg gagcagttgt ttcttttttg actttgctgt 2400
 atcaaattgc actgtgtgaa tataaccccaa tttatccact ctgtttttga tggacttttg 2460
 agttgtttcc aggttttagc ttttatgaat aatgctgctg tggacattca tttgcatgtc 2520
 ttttgcacat atgtttccat ttcttttggg tttgtacctg tgattcaggt gttgctgggc 2580
 atgtgcaggt cgagctttgc aagatgttgc cgaaaaaact gagtggtgaa agttcctgca 2640
 gaaattcact cccaccacca gtatctgaga gaagttctgg tttctccaca ccctcgacag 2700
 tacttggtat tgtcttactg atttcttttt aatgtttgcc ttttaaggag gagtggtata 2760
 tcaaaacaac atggtatatc atattgttgg tttatattcc atttccctaa tgaattttta 2820
 aacatttaat gggtatttaa tgtccccctt tataaaatga cagttcaat 2869

<210> 260

<211> 2287

<212> DNA

<213> Homo sapiens

<400> 260

aataaatgct ttggagcatc ccagaagttg ccaaggaaga atagtggcaa ttggctgtga 60
 gatgctggac acaggacca aggggcatgt tactttcttg gttccatgta gcactgtcag 120
 ctacagcgga gatgtgcttc ataacgagta catccttccc cccggccaca ctgtggactg 180
 ccagaccagg tggagtgggtg tccagaagca gcacatgggtg aatgccatgc tcttcaagat 240
 tgctcatggc atatattgaa gatacaggga agatgggtggg ggacatgcca tccacaatga 300
 cttcaaagcc ccagtacttt catcccaagt ccctcaccag tgacaactcc catatccccc 360
 ttctcctccc caactggaag gctgattgcc cagtgaacgt caccatgtct ttgaagcatc 420
 tcatcaagaa tctgctgaat tgggacatct ggggttgggaa aataggcatt cctctgtgga 480
 agacacccag gctacatggg agctatacaa attggttgaa ctcaagtggg aagaacacct 540
 tgcccagaat tccccgaaag actggtgaca atgggggatgt tggtgacgtg gggaggcaga 600
 agcagcacca ggagaaatag ggcagtggac caatggacat ctcaactagt tccacatctt 660

tggaagctaa aattgttggc aagagaaagg ttctactcta gatttaatat ccattgaaat 720
tccatctctg gtgttatgtc ctgtgtctgg ttaagtgtcc catggaagga gggcgcctcc 780
atgtcagaac cagccctgtg tcttttacct ctttcatggg gctatcccta ggtcccaggg 840
tgcgctgtgc cagtgaagcg ttttgaattt caagggacag ggcatactga gaaatgtagt 900
ttcccaaagt gcctgatcac tagagtggct atatggctca ttttgtgcct cttcttcttg 960
agtaattaac agcaccttct ttcactctca gaagtatcct ggtttgataa taaattatat 1020
ggccccattc ctaacacaac ctctgctttt ggctcacagt ctgcatctag cctgttttcag 1080
gacattgctc attcttcccta cttgactgcc agagggtgcca ttgcaggtga ggtttagttc 1140
tcctttgggt tctaaggcag tggaggttaag acagtagctt ggaagtcaac ttttctgatt 1200
taggaaagca gtctctttcc taaggctata gaggatttat ttcattgtagg tcccagttgg 1260
taggttaaaa aagaatttgt aaagtgtttc taactcattt atgctggagg ttgcaaattt 1320
ttttggtgaa aaataagacc ttggcaatga ccttgagcag taggatatta aattttaact 1380
cccacaagct tagcattcca ataatggaac actacgcata aatgggttaa tggtttttag 1440
tctggctggg cgcggtggat cacttgaggt caggagtcc agaccgcct gaccaacatg 1500
gtgaaacccc gtctctacta aaaatacaga attagccgag cgtggtggcg catgcctgtg 1560
gtcctggcta ctcgggaggc tgaggcagga gaatcacttg agccggggag gtggaggttg 1620
cagtgagccg ggatcacgcc attgcgcccc agcctgggca acaagagcaa aactctgtct 1680
cataaataaa taaataattg ttttttagtct ttatcttggg aaaccaagcc cctaaaaatt 1740
ctaattattc ccttgataca tttttataat ggaaaaaata aaatgattat aaatttcaga 1800
ttttattttt taaggttaca catatctgct tgtatatgtg tgacacagtc ctgggaaaat 1860
ataaaagaaa ctgttaatgg ataccattag gtagtagaac tgagatggag gtagatgact 1920
tttatggtct gttttatact tttttgtatt tgaattttcg taccaggtac atgcattact 1980
tttacagttt aagaataaaa atgttggcca ggcacagtgg ctcacgcctg tgggccagc 2040
actttgggag gctgaggtgg gtggatcagt tgagatcagg agttcgagac cagcttggct 2100
gacacggcaa aacccgtct ctactaaaaa tataaaaatt agctgggcgt ggcacgcac 2160
acctgtggtc ccagctactc gggaggctga ggcgggacaa ttgcttgggc ccgggagggc 2220
ggggttgtag tgggccgaga tcgtgccgct gcgctccagc ctgggtgacg gagttagact 2280
ctgtctc 2287

<210> 261

<211> 2297

<212> DNA

<213> Homo sapiens

<400> 261

accgaggcat	cctgggcatt	cagtaggaag	caatgagagg	aaagatcctt	ggccctttca	60
gagatggggc	gaagggtcag	ctgtcccctc	tgcaagggtg	cagattcaga	agagttggaa	120
ttcctccgga	gtcggccctg	ccaacatgcg	cacgtgtcct	gcgggggtcaa	tgatctgtgc	180
agacgacttg	gaaatccgct	gcgtgccgcc	caggcgcggtg	catctttgct	taccctttcc	240
tagatcggtc	tcagccccgc	aagcagattg	gcagcttctg	gggtgctggg	acggcgcccc	300
ctcctgcctt	cccgctagca	tctggcaggg	actggagtgc	ttcctggaga	cccgtaggcc	360
ggggacaggt	caccaggtga	agcagcgcg	ctccggagct	gatgctgggt	ggccgactgc	420
gtccgccact	tctcctgccc	gcctgcccgt	gctgtgtgcg	tcctcatagg	tcttgacaga	480
tggtggcggc	tttgacagtt	cgtcagcccc	gcgtggacac	tcgtccccag	tactgtctct	540
cggatcgcca	gctctgcttg	agagacgtgg	cgcagctggg	gtgggaattt	ggaggcagcg	600
gtgaaatggg	acgggaactg	tgtcttagga	acaacaaaga	caggtgctca	tgtcaccacg	660
caggcatggc	ttgtgctgaa	cgccggagaa	aggctcaggg	gagcaggagg	ctgcagcacc	720
gagagcatgg	gacgtgaata	tacgagacct	gggttccagg	cctggctccg	tggctctggg	780
ccaattactg	ccctctctca	accagtttc	tgtataataa	ccctggtttg	acatgatgtt	840
ttcgaaagat	ctttttccag	atccagtatt	ttctttaata	tacatacata	ttttctaaat	900
ggctgttggc	ttgttaagtg	gactggggat	aattgctacc	gctttcaacg	agagaaactc	960
gagaatctga	aactcagtat	ttctacgaat	ttgcgcaaca	tgggaggtca	tcgcctggac	1020
accactgccc	ccttgcgga	actcatctaa	atttgtaggt	ggtgacaagg	aattcaaggg	1080
cttgagggtt	caggccttat	aaacttgggt	ttataaagcg	gttgataaat	gtccccaag	1140
ctttatttat	ccctggaagg	aactgtaact	agatcagagg	ctttatctgc	ttgatgccat	1200
aatgcctttc	ccctgccctc	aagacagtta	tttacaggca	ccctctaagt	ggatctagag	1260
ccagattacc	caaatccact	tgcgaaataa	ctcagattaa	aatttgcaag	cttcttggga	1320

gcggagtgag gcggttaaaa aaaaaagaat aaaatttgca agcttctgag acctagtatg 1380
 ctccactacc agagcggatt cattgataga ggagatgaca ctaagtccat atgggtatttc 1440
 tgggtattaa acacccatt tgtatggaca taatcttttc tcttttggtt ttattgaagt 1500
 aaagtttaca taacacaaaa ttaaccgttt taagtgaata attcagtggc atttagtaca 1560
 ttgactatgt tacgtaaacc atcacctcta tctaggtcca aaatatagat atatgtatct 1620
 tttgagaaag agtttcgctc ttgttgccca ggctggagtg cagtggcatg atctcagctc 1680
 tccacaacct ctgcctccca ggttcaagca attctcctgc ctccagcctcc cgagtagctg 1740
 ggattatagg cgcattgccac cagcccgccg taattttttt gtattttctat tagagacggg 1800
 gtttcttcat gttgggtcagg ctgggtctga aatctcaacc tcaggtgatc cgcctgtttc 1860
 tgtctcccaa agtgctggga ttacagacgt gagccaccat gcccggccaa atattttttg 1920
 tcaactccaga ataaaaccct gtaccagga tgcaggtaga cccattccc aatacttcat 1980
 gcacctggca gacaccaatt tgctttctgt ctgtatgggt ttacctattt tgggtatgta 2040
 atagaaatac atatactttc tgtccatttg tgtttgtttc tttcacttaa cataaggctt 2100
 ttgaggttca tacacatcgt gacatgtaac aatacttcat tcctttttat ggttgaataa 2160
 tattctgtta cgtgtatatt ccacattttg tttttccatt cgtccactga tagacatttg 2220
 ggttggttct actttttggc aattgtgaac aatactgcta tgaacattca tatacaagta 2280
 tttgagttcc tgttctc 2297

<210> 262

<211> 2560

<212> DNA

<213> Homo sapiens

<400> 262

ctgtccttaa acactcactc ctgaccttac aaccctggct gttacctggt taacaagccc 60
 cagggtgttg ctacagggtg catcactgag agcccttggt tgcagatctg cccagctct 120
 cccacctgtg actgaggcta gcaagtcctc cgtgggctgt agagcctagc gctgggtgtca 180
 gaatcgcttg ttgcagggtc atcttcagtg tctttccac agccacatgc tggggaaaga 240

cggcaaaggc gctagaggag caggagaaca aagcaagctg cccagacca cccggctttc 300
gcagaacca gatgatgctc ctgtctcccc ctaagtataa cgtgttattt agtcagtatg 360
atccccattca gtgcagaagt atcgcttagg aatttcctgc cccaccacc ctgttttgtt 420
cttaatgaag ttcaagaaca aaatgagatg atagtcaagt tatggagcag gctgcagtgg 480
atacaagggc agaaacacag tctttggagt tagacctggg atctgcattg attggttgtg 540
tgactgcaga caagttattt agcctcatta aggatgaatt tcttcgcaa aattggaata 600
atacctgccc catacgactg ttgtgagaat taaacactgc aacttttgat gttcaaattc 660
tattttctct ccttctagca acacatactg ttagtgccag gaaccataaa aattataagg 720
ctgtatctag aggctgaaa ggaagctaaa atatacagtt tctactctgt ctcttttctc 780
ttggttatgg tatcagagga aatacacata ttttcttagc ttcaaaccac caaaaaagat 840
gatgcagtaa ggagatggga aatctaattt ggaatacagt gtgcaaactt tattttcaag 900
cagactttga aaataaaact caattcttac gttagaggat tatctgctta atacaattat 960
agggtaccag tttttgaagt cacatcgggg ttaaataaga ttgcaggttc atgggggtcat 1020
atttgaatgt tctgatactt acatatgggg tgggaaggag gaatgcatgc ttttctcaag 1080
ttaagacaca taaaagagtt gtcctggccc aggtgagact cgcctttgtg tagcagctgg 1140
agcttcattg cacaggcaga tagggtgctt gtgtcctgat gaagtaagag aatatacttg 1200
gaaacacttt gtgtactgtg aaatactata caaatgcagg gcagtacaaa tgtaaattat 1260
aatgtatttt agtaataatt ttagctttta tttcatcata tataataatt tgtagtgact 1320
ggtgtgaagt taaatagaat taacctagaa ttaatgagtt ttgtattgct ctcatctatt 1380
tgaagcatca gctgtgcctt tcatgttgcc ttgtgcagcc ctgtgtaacc tcctctgtgc 1440
ctttcccatg gagcactgtg tcatatcaca agtagaacta caggaagata tttctctca 1500
gggcagaggc tgggtcttcc gattgaatct cccttctttc ttcattgaga tcctcttctt 1560
ctggaagctg gtttcacatg gtggcttaga tttttccatc tttgtatcta gcaccatttg 1620
aatcagtgt tttaggagta agaattgcag cacagccaag ggtggactgc agaggaactg 1680
ctgctcatgg aactggctcc tctctcttg ccacttgagt ctgttcgaga agtccaggga 1740
agaaacttga agagcaaaat acactcttga gtttgttggg ttttgggaga ggtgacagta 1800
gagaaggggg ttgtgtttta aataaacaca gtggcttgag caggggcaga ggttgtgatg 1860
ctatttctgt tgactcctag cagccatcac cagcatgaat gtgttcgtag ggcctttgag 1920
tgtggcgatt gtcataattt gttggataac aatgtattgg gtgtcgattg tcatggggca 1980

ggggagaggg cagtacacct ggaggaccat tttgtccaca tcgacaccat cagtctgctc 2040
 ttagaggatg ccctggagta ttcggcgttg attgcggggc acccgaaatc agacttgcca 2100
 cctggactgt cgaggtgcag accctgggag caccactggc ccattcttta cacaggctga 2160
 ccgatttctc ctggtgttca gagtctgttt ttgtctagca ccatttgaaa tcggttatga 2220
 ttaggggga aaagcagcag cctcgaagcc tcatgccaac tctgggcagc agcagcctgt 2280
 ggtttcctgg aagatggatg ggcagagaat aggggaaggaa gatcatgctt ttccctacta 2340
 acttctgtaa ctgcatgtat gatacattat tgcagaggta agagatagtt taatggattt 2400
 ttaaaaacaa attactataa tttatctgat gttctctagt tgcattttgc tgaaatgtag 2460
 tgctgttcta aattctgtaa attgattgct gttgaattat ctttctgttg agaagagtct 2520
 attcatgcat cctgacctta ataaatacta tgttcagttt 2560

<210> 263

<211> 2912

<212> DNA

<213> Homo sapiens

<400> 263

tttttagag atgggatctt gctatgttgc ccagggtcat cttgcactcc tggcctcagg 60
 tgatcctctt gcctaggcct cccaaatgct gggatgacag tgatgctggg atgacaggct 120
 atgactgatt aaaaaaaaaac atttaaaactg agatcattgc taatggttaa tgagtcaagg 180
 cgtactcaga tgcgagcctt tctagggcat tgcctgctgt attcccaggt ttccttgtgt 240
 gataggcaca tgctcctcag gtgggtcggg tagtgaagtg ctctggagca atgcgtgac 300
 ttaccgtgct gggtttggag gtgtcagcct tagcactgct ggagagtgtg tgcattctcag 360
 actcagtttt caatttctg atccctttgg accatttccc atattgctcc cggacctgca 420
 gaggcaaagt gtgtactggg tcagctcaca gagagcagtg aggacaggaa gagtcttggg 480
 tgggagctgg gcagtgggtac ctgctggctg aggaggcagt acaccaggaa gatgaagaca 540
 ccctgcaggc tgttgatgat ggtgaagagg taggccatga cccgggcagc cggaccacc 600
 tgcaagatgc ccagacacca cgtgcagccc aggatgaaca gctgagctgt cgctttaaat 660

gccagcatcc tggattgagt aagaaaggag gctggtgatg caccagaga aagagaatca 720
aggctatttc atctgtgccc atggagccac catgcccggc cttctttgtg cttttgttat 780
aggactgctg acaaaagtcc aaagaagttt ttaacctttt agtttattga ttcgtaatgt 840
ttgtacatct ttgtggggac atatgtgata ttttggttaac atgcatagag tgtgtcatga 900
ttaagtcaga gtatttgggg tatccgtcac ttcgcgtgtc taccatttgt atgtgttggg 960
aacacttcaa attctcccct ctagctattt tgaaatatac aacatattgt gaactagagt 1020
caccctactc tgccatccaa tattataact tattccttct atctgactgt atgttgtacc 1080
cattaaccaa cctctcttca tcgccttgcc cactcacata ccctttccag actctggaat 1140
ctatcattct actttatfff ttttttagt ttttgaggca gagtctcact ctattgccc 1200
ggctggagtg cagtgggtgtg atctcggctc accgcaacct ccgcctcctg ggttcaagcg 1260
gttctcctgc ctcagcctcc cgagtagctg ggactacagg tgcctgccac catgcccggc 1320
taacttttat cattctactt tctgcctcca caagatcagc ttcttcggct cctctctatg 1380
taagtgacaa cctgtggtat ttgtcttttt gtgcctggct tatttcactt aagagagtga 1440
cctccagttt catccatgtt gctgcaaagt acatggtttc attctgtttt gtgatcgaat 1500
cgtatcctat ttgtatata taccatttac cagtcaatga agattcttcc tgttgctctg 1560
ggattcacia actgagatta gacatggaca aaacatgttg catgggggtct caacaggata 1620
ccactgaatc tgtgatggct gccatagaag gatggctgcg tctgtttttt ctgggtccct 1680
tcaaaagacc ctgagaaggg acctcagtgg ctgctgaggc acatggcttg gctcttggga 1740
accatacatg tctgtgtggt tatcaccccc ttctccatct taccttgtgt tccggagggt 1800
ggacacttca ctattgaggg aggagagtct gtttttcaaa atccagagag tcaccagaaa 1860
gagaactaaa ttcaccttca gaaaaccaca gaagatttgt tgaatagatt ttgaaacctg 1920
ttatctcttt tttttttttt ttcagcctgg gtgacagagt gtttctaaat aaataaataa 1980
tgactgaatg gtctcttaac gttccttttt atggctgaat aacatttcat tgtggatata 2040
ttacgttttg ttatttcatt catcagtgat aggcatgtt tccaattttt gactattcta 2100
aatactgctt ctatgagcat tcatgtacaa catttttcta aacgtttatt ttaggttcag 2160
aggtacattt tgtaggtttg ttatgtaggt aaaatgcatg ttgcggcggt ttggtgtaca 2220
gattatttcg tcaccctggt catcagcaca gtactctata ggctcgttat ttatcctcgc 2280
cctcctccca ctctccacc tcaagcaggc ttcggtgtct gaagtttcct tgtttgtgtc 2340
catgggtacc caatgtttag ctctactta taagtgagaa catgcggtat ttgattttct 2400

gttcctgcat taattcactt aggataatgg cctccagctc catccatatt gctgcaaagg 2460
acatgatcctt gttatatttat ttttttgaga tggagtctcg ctctgtggcc aggctggggt 2520
gcagtggagc catcttggct cactgcaaac tccacctccc aggttcaagc gattcttgtg 2580
cctcagcctc ccaagtagct gggattacag gcaccacga ccacgcccag ctaacttttg 2640
tatatttagt agagacgggg ttctgccatg ttggccagga tggctcaat ctcttgacct 2700
tgtgatctgc tcgcctcggc ctcccaaagt gctgggattc caggtgtgag ccaccgcacc 2760
cggccgatct ccttattctt tatggctgca tcatgtacaa gttttttgt ggacatcggt 2820
ttcatttggt ttgggtatat acctgggtca tatggtagct ctatggtaa cttttggagg 2880
attagtgtta atagttcaca aaaccaaaaa cg 2912

<210> 264

<211> 3027

<212> DNA

<213> Homo sapiens

<400> 264

ccatcgcaag gaaacgcttg ctccagtggt taccaaata gatttggaac cagtttgtgc 60
ccaagctcaa atctcgtag catctgcctg ttccctggt gtgcatgtgt cctgcctcga 120
tgcatttggc agcaggtggg atgcgctggg cctgctgcct ggttgctgcc ttgctgtgt 180
tatttagccc caatggcgtc tcccatctcc cccgcatggg aaaggccggt gctgcctct 240
gggagcctgg caggaggaac actgggttgg ggaggggggc atgtgtggtc ccaagtctgg 300
aagaagctcc ttcctcttct cccgctggga gctgcgtggc cgatgggagc ccatctccac 360
cgcggcacct gcatggtctc agccttccgg ttccggtgccg ctgtgccggg ggctactctc 420
ttgccagtgg ggaccacagc cctcggtatc ccataggtca agggcgtag gccctctcag 480
tgagcttcag tcattcactt tagaaactgc ttcccggctc ggtctgctag gtgttgaaca 540
tgaccgtggc actcactgaa aacacctgcc tgggagggca tctgcggcag gaaggctgct 600
tcctcctgg ctgaggggca ctgccctgcc tgacaagggc gtggcttccc agggcctggg 660
gatcgaggtc tcccacaggg tggcccagca attggaagca gatggtctca aaccctgaaa 720

cgtgccaggc attctggaag tttgcagggg tgtcctgctc agctctttat gaacctggga 780
agatgacagg ctctgttggg ggcccacggc acacatttca ggggggtctgt gggacttagc 840
tgaccccacc tcagacagat gcagacagcg gctcatcacc ggggggtccc tcacgggtgt 900
ctgtctctct taggttggag caaaacgtcc cactcactgg aggcacctga ggacgacggg 960
ggctggtcaa gtgcagagga gcagattaac tcgtccgacg cagaggagga cggcgggttg 1020
ggccccaaga agctggttcc aggtaaatac acggtcgtgg cggaccacga gaagggaggc 1080
cccgatgcgc tgcgcgtgag gagcggggac gtggtggagc tgggtgcagga gggcgacgag 1140
ggcctctggt acgtcaggga cccgaccact ggcaaggagg gctgggtgcc ggccagcagc 1200
ctgtccgtcc ggctcggccc gtccggctcg gcccagtgcc tgagcagctc agagtcgagc 1260
ccgggggtcgg ccgtgctgag caactcgtcc agctgcagcg agggcggcca ggcccccttc 1320
tccgacctgc aggggtagcg cggcctcggc gccggagacc cgcgcgctgt ctggggctgc 1380
ggtggcgtgg ggagggcgcg gccccggac gccccgagga aggggcacct caccgccccg 1440
accagagcg cctggccgtg cgggctgcag aggaccctc cggggcagag gcaggttcca 1500
cggaaaaccc cggcccgtg gggcttcccc ggagactcca gagccacag aggaggggcc 1560
gcagggaaca gccccggcg gcaggcgccg ggcagcggca tctcgtcctg gctccaccgt 1620
gtgcttctg cctccggacg gtgctttcag gggacgcgcg gaccgtggtg gagctgcttc 1680
cggagaagtg gaggatctc tggccaacgg cctgaggaga gcggggcacg gggctctttt 1740
agcttttaca agtttttaga ttttttcaag cagggatcaa tcccgtggcc attttttgtg 1800
gtactttggc ctcaattctt caccaggaat cactgtgttt acatgaaatg acaatttgat 1860
actgtatttg atagaaaact attttttgt taccggggtt tacatagaag cacgttgttt 1920
ataccactaa gtgactttgg cggggctctc ccatggaaac ggatggcact ccctgaagct 1980
ccctggtcac aggtggatga aaacgtgtcc gtgggtgaca tcaggtggtg tctccaccac 2040
caaaagcagt tagaagccaa ggagattcct ttatctacct agggttcatt ttcaaaagaa 2100
aatttaact ataatttaa caattaacgt tcttttctac aaaaaaatg cagggacttg 2160
atttttttaa agagcttcac tgaattagga tatttttatt gcttttaaag aaaatacaaa 2220
gatgcagttt ctgcagggtg tggcgtggac cagtgtgcc gaccatagct cagagagccc 2280
tgcccctgcc tactgcact gcagcctcct cggaggccgc acctccactc cactccccac 2340
gcgccccctg cctcccaccc aggtccacct gccacctggg gaccaccttg agtacagaag 2400
tgaaagtggg gagagtattt tattcaagtc acagcagaac tggaaaaaaa ctcttctgtt 2460

ttaccaactt cttgtgtttc agaaacatat tctgttcaaa acttttgaag ccctttcggt 2520
 gtctagtctg cagatgtttt tgtatgtgtg cacctctgac catgtgtgta catatgtgtc 2580
 ttgctggaaa ggacatatc gctgtccccg tgctgtctggg agggccgcct cacagcctca 2640
 cggttcccag ccccagcaca gtggaggcag gcgtggctgc attcccctca cgctaccctc 2700
 ccagcggctt gtagccgtca ctggccagac ctccagggtg cggaatcaaa taggaagcat 2760
 gcagagactc ggcagctttt cctctgatgt gtaagttatt tggaacgcgt gctgtgtccc 2820
 gcgatgtccc tgatgtactg tgcaggcgcg gtgcctccgt ctcgtcgac agctgcgcgc 2880
 ccttgtgtga ccctcccat aaaggcactt tacagcttca tgtttcatcc actgtcactt 2940
 ttttttaact gctgatgtaa atggaatttt aaaagcagag ttctttattg tatggatgac 3000
 gtttgaataa atatcagcaa ctctgc 3027

<210> 265

<211> 2338

<212> DNA

<213> Homo sapiens

<400> 265

atccatccca tgactgacca tgttccatt tttttcagtt gagttggata gacacgaata 60
 tgttcacgca gacaggagcg ttagaattga gaaccagagt gttctcagct ggcagatgtg 120
 cccagataaa accaccaagg ggaaatctgc acggcgttcg atgtaaagtc acacctttca 180
 actcacggta tcaactgcat ccgtctgtga gagggaaaga agttcggtac tcaggattca 240
 atcccagacc cgccaacca cagcatgccc agtccagggg atacttgggt acagggaggc 300
 acctcacacc ctctctcaca cagcctgggt ttggaagcag ccagcctgcc tcacatccac 360
 tgtgtggcta ctaattaggg tctgttccaa gctgagctcc tccctctctc ctttgtgggt 420
 ggcggagctg ctttgccaaa gggacccag gcatgggtgg aagtcgcctg gggcgagatg 480
 gaaatttctg gagaaatctg gaggtttcta gattatacaa tgggtgggcag tgatggctac 540
 agtttaggga gagggctttc tgaagccaaa atttgcccat tcgtgcccag ctctacgtgt 600
 tcccagtggg ccatttcttg accccacttg gaaaatgatt ctccactgct cttcctgctg 660

gggacttcca aggtgcttct gccaaaggct ttcattggtc tggaatgccc accttttatg 720
gagggctgcc cactgggtgc tgactgctcc tgcccagata cgttctctta aatgtgttat 780
tcaataattc agcttactca ccgcctccag gcaatgaggg aaagggcttg gccaggtgta 840
ggggcaggag agcaggcacc ctgagggctg ggattgatga gcattttcag gagtcacaga 900
ggcgtagccg ccctaaatgg acgtcgtgcc tgagctggaa actcttgacc cctaaccaag 960
gtcacaaaac caggtgcaga gattggactt ggcagcaggc aggccttcag ggagtagggt 1020
gatgggagca gacagtgccc aggaggacac agcaagtccc cagaaagcag ggccatcgct 1080
ccaagggcca cagtggctga ctggatggtc ccaacagtaa ggcccctcct ttagacaaaa 1140
gtcaaaaatc ctttctcccc ttctctgtcc ctcacttcct atgaagtctg gctctctcag 1200
ccacacctgt gatattaaga atcctaaaac aaaataatga tagggtgaga atgtccaggc 1260
agcatggaga ctttcaccag ggccagcaaa cccagggtatt tacaatctct caaccgagct 1320
accaggacca cagctggagg gcgctggctc cactgggtgtt gggggaggaa gttgtccctg 1380
gagagttgcc tgcctgagat gctttcattg gaggggtctt tgaggactcc atctcaagtc 1440
agccgaaacc tcaagctgag acgaatgtga tgctgggtga tagtgagag tcttaccttc 1500
cacaccagat ccaggagact gttaggtcac atggagctct gtactgagag gatttggtgc 1560
acacctgggc tcagcaggga gggcgccat gtgaggggtga gaagcaatga cagcccaagc 1620
ttctctgggtc tggccccccc tacgccagct ggggctggat gcagtgcaga cgctgtgcct 1680
cgccctcctt acacaaaccc attaacggcc atttctcttg gttccagggtg ttctcctaca 1740
tagccactct gctctacgtg gtccatgcgg tgttctcttt aatcagatgg aagtcttcat 1800
aaagccgcag tagaacttga gctgaaaacc cagatgggtg taactggccg cccactttc 1860
cggcataact ttttagaaaa cagaaatgcc cttgatgggtg gaaaaaaga aaacaaccac 1920
ccccccactg cccaaaaaaa aaagccctgc cctgttgctc gtgggtgctg tgtttactct 1980
cccgtgtgcc ttgcggtccg ggttgggagc ttgctgtgtc taacctcaa ctgctgtgct 2040
gtctgttagg gtcacctcct gtttgtgaaa ggggaccttc ttgttcgggg gtgggaagtg 2100
gcgaccgtga cctgagaagg aaagaaagat cctctgctga cccctggagc agctctcgag 2160
aactacctgt tggattgtc cacaagctct cccgagcgcc ccatcttgtg ccatgtttta 2220
agtcttcatg gatgttctgc atgtcatggg gactaaaact cacccaacag atctttccag 2280
aggtccatgg tggaagacga taaccctgtg aaatacttta taaaatgtct taatgttc 2338

<210> 266

<211> 2186

<212> DNA

<213> Homo sapiens

<400> 266

agcgccccgc	aagtgttcga	gaggaaggcc	gcgggggtat	ctgccatcag	gaaagacaaa	60
atggagccac	gcaggggaaa	gcagcatggg	gtgggggaag	gtggcacgtt	tccggcgcag	120
ggagaggaag	aacaggtgct	cctccaagga	agactgccgc	tgctccccgg	gccctggcag	180
cctgccccgc	cgcagagctg	cgcgcacgcc	ggcctcctgg	cagcggagcc	cgcggcggaa	240
ccaccacagc	gaagcattct	gtcccctcgc	agctgctctc	ccaaaaacta	caggtcctcc	300
aggaggccga	gataaaccta	cgcgcagcct	tgtcttccgg	gagaggagag	tgctgttttc	360
cctacgcgaa	atgatgttta	agatccctgc	ccgagcccc	agtcccgag	ttaagcatca	420
actggccgcc	taacgggatt	gttcttccgc	ttggcatttg	caagggatgg	atttttctcc	480
gttctctcct	ctgccaagtt	tgctctctct	gaggctctct	gggagggtat	ttgtaactct	540
gcagttcagt	ttgaggaagg	aaaaaaaaat	aagacaattt	tccaaagcaa	tcgtgtggtc	600
tttaaaatat	tgttatgtaa	atgaatctaa	tgtgtctcta	aattcattaa	gtgggttgga	660
gggttactag	ccctggaggg	ccccagcgaa	attggcagag	acattttcac	tgtctaggtt	720
gtggttggtg	accttttctt	ctgtcttgct	tacactttcc	tagggaggag	gcaggaactc	780
gaggggctta	tcggagtggc	agaaggaaag	ccccactga	aatgcctgt	tatgcgcctt	840
ctgggaaccg	tcctctcttt	tcacttcctc	ccagccccag	ctggaattcc	caaagttagc	900
ctaaaccagt	accatacctg	ctagacaaat	tgtataaatt	agacatccct	aagaggagg	960
agaattttgg	atggggagca	aataaaggaa	aaggaagctg	ccaaaacagt	gagtcttggt	1020
cagaatttca	cagtcatttc	tcaggtctgg	gttggaggat	gtaaacacag	gggaagtcaa	1080
gacagattgt	tgccatccta	gctacttttt	gtaattggga	agcatgtaaa	gattgactcc	1140
tttttcttgc	gtccttcaaa	gagcacgaaa	agtggggcag	taagtattca	aaagcatctg	1200
tttctgcct	gaaccctct	gagtaccaga	gggggccagc	agaagaacct	gcatgggtcc	1260
gtaaacaatgc	agggaaggct	gtgacatagg	aagccaggcc	cacagctgag	cctcccaagg	1320

atgaagatag gcattcatcg aaaaactgtt tttgtgtttc ttccagtact gctacttttt 1380
 aagtataatt tacatacaat aaaatgcaga tttttaagta tactgatcta tggattttga 1440
 caagtatgta cacccatgga acccaccacc catcaagaaa cagaacttag gccgggcatg 1500
 gtggctcacg cctgtaatcc cagcactttg ggaggacgag gcaggcggat cacctgaggt 1560
 caggagtcca agaccagcct gaccaatata tagtgaaacc ccatctctac taaaaaaaaa 1620
 tacaaaaatt agctcggtat ggtggcacat gcctgtaagt cccagctact tgggaagctg 1680
 aagcaggaga atcggttgaa catgggagac ggaggttgca gtgagccgtg agccgtgatt 1740
 gcaccactgc actccagcct gggtgacaga ataagactct gtctctaaaa aaaaaaaaaa 1800
 aaaaaaaaaa aacttggtca tcaactgcagc agattccctc gtgccctttg tttcaatctt 1860
 cctctcatca aaggacacct ctgatggatc tgccttctgt cattacagat tagtttgcatt 1920
 tttctaattg catattaatg aaactacaca gtatgtagtc attttctggc tttgtttgct 1980
 tagaatgatg tttttgaaga tcacccatgt aggaacatat atcgagagca tctatatgta 2040
 gtttgtttca ttttattggt gagtaacatt ccatgatatg gttataccgc catttgttta 2100
 tgcattcatc tgttgataga catttgggct gtatattggt ttgtggctct tatgagtaaa 2160
 gttgcaatga atattctttt agattt 2186

<210> 267

<211> 2904

<212> DNA

<213> Homo sapiens

<400> 267

tttaacctat ttttacacgt cgatgcagtc cacttctctt tacacagatg taccgcaact 60
 cgtgaccagg gctggctggg agggcaacgc agggactgga cgccctacag ggccgagccc 120
 aggctgtgct ggagggtggg gctggggtgc atggggaggg gagcagaacc cagaaccag 180
 gagccccgcg tgggccacac ccaactcaga gccggcctga gcgttcacgg ccaggcagcc 240
 tcgcttcctt gcagccaagg gctgggggcc agggctgctg ttctgcactc tggggtgggt 300
 gaggggggacc ctgggctgtt tgctgtccca agccccctct ggaagttaga agcagcaaag 360

ggcccgggga agccgggcat gtgagagggg tgcgtcccca ggtccccag agggccctgt 420
cgccgaggac ctttctgaag gaagcagaag acgccatttc ctctacttca cactgaactg 480
tcccagccac tgcatttagg gggcattggg cggaagatgg tgcatttcca tggaccattt 540
tacacttacc ttttaaagca aagcctcatt ttctaaacct ctgacttgtg aagcacaatt 600
cagcctccgg gctggggccac gtggagagag aggatcttct cagcaaggcg agatcccggg 660
cggcggctga catcaggagc gccaccctgc gtcctttgct gctggttcct tactggtttg 720
tacggtcagc gctggaaact tctattaaat ggatgcattc tggaggcatg aagttacaag 780
tcaagtcgcc ctgctcgtgt ttccaaggct ctacacctc ccagccaccc cactttaagg 840
gttacaacaa cctgctgggg tccccacccc aaccccatag gcaagcccc attccccagc 900
caggccagga cagtccttcc aaaactcggg aaccaaattg tatttggtta ctggtgactg 960
gatcctggta gccaggaaac ctgcctgggtg gtgggggtcc cagagtccag gagggctgtc 1020
tggtgagctg cccatcagcc tcaccctgc agccaggcat gtccctgggg tgggcacaga 1080
gaccccaggc tctgcccga gtggcacaga actcatctga ggccagtggc tgctggggat 1140
cccctacact gggggctcagg gctgccccag gtggggatgt gtgtgcacct caccacgttc 1200
acttcagggt accccaagag gctgaagggg aaggaccaa aggccgaggt gcagcccctc 1260
cccgggtgtca gggcagacaa cacagcagct gctggagggg ccggccctgg ccacacagac 1320
tagctagtcc ctactcccg gcctgtctgg aacctcctg ctcagaaggt gccactagc 1380
cctctgtggg ggacagagcc agacatgggt ggtcaggag aggctgtgtg gattcagggg 1440
accagaaagt aagtcccagg acctgatgg agcggcaggg attgatgttg ggctagggtg 1500
gccagagcct gtcccagcag ggctggggtc tatcacgttc ctgggatcca agcagcgagc 1560
acgccctgcc ccgcagtcac cccgccccgc agtcgccctg cagctggaag gccaagtct 1620
gcctcacctg ggtggcctct catgtcccc acaccctggc cccaggcga ggggggctgc 1680
acagcacctg cagggaggag aaggagaga aaagccggtc tggctgctgg gatgggaggg 1740
ccacagtcc agcagtggca ggggaagctg tagccctgg agccccacac tggaagagct 1800
ggcctgcagg aggcacatg ggggagtcgc atgacttatt cgggattgac ttgcgatgtg 1860
gatgggtgtc ccggagtccc ctgtggccac tcaccacca tgaggccggg aggcatttta 1920
gcctttgagc ctctctccag gggtagcgg agcccccaa agagggtga aggccttgctg 1980
ccaagaggg gctgggtgag cacttggggc ctctgagaac atcagtggtc cgttcctcc 2040
tgcacactgg tggcaagtgg cagcattttt tcataatctc cagtaatgag gccacttcgg 2100

gtccagccct ggacatccga ggaggaggcg ggcagtcctt gcccttcac taaccgcaga 2160
 ggatgccagc tctaggcccc ctgctccgcc tggagctcat gcgggcagcc gtggacacag 2220
 gtggcaccca gcgcccagcg gcctgtgaat cctcccgtgg gcaaagctgg gagccagggg 2280
 ctggaaccag gcaggtcagt gactgtgaga tgccagctgc cagcccaaga aaagctgcct 2340
 gcagcatctg gaaacttctg tgctctcctt ggctctgtg ttcttcatct ccaggtttag 2400
 ggagcacccg ggtgcctctc tgcttgctcc gagcccactc accaacagcc ccagcttgca 2460
 cagtcatgac atcaggaagg tgggtccctg ctcccagccg tcctcgtcca ccatcacttc 2520
 tcccagcctc gtgtcctgct gaccataaa aggtccccct gcaaagtaca ccaagtgaag 2580
 taggatctga gcaaaggttg agggactgaa ttccctaaga agtcatcact gcctagaata 2640
 agcgaaaaga atttttttta atgttttacg gtagaattat ttgaaacata caaatgagt 2700
 gagacacctg ctattttcct tattcctgtt ttttgtttgt ttttattttc cttataccta 2760
 attcatctaa cagaaaactg ggcagggcgc agtgtctcac acctgtaatc ccagcacttt 2820
 gggaggccaa ggcaggtgga ctgcttgagc ccaggagtgt agtttaagat cagcgtgggc 2880
 aacatgatga acctgactg tatc 2904

<210> 268

<211> 2882

<212> DNA

<213> Homo sapiens

<400> 268

tggcagctcc tcctctcctc tcctgacaga gtagtgagtc agtcaccctg gacctgctga 60
 cctacacaga cctggagtcc ctgcggaacc gcaagatggg gggccgcca ggctccttgg 120
 cccccaggtc ggcccagctc aactccaagc gctacctgat cctcatctac tccgtggagt 180
 ttgacagggtg gggagaaggg tctggctcca gggccaggct ggtgggcggg gtgggagagg 240
 atgtgggtag gccttaggaa cccctggcac ccaggcaagg tgatattggt taagccttgc 300
 ctitgggaatc ttccctgttg gggtttgtat catttagtat tgtgtttggc tacaagtagc 360
 agaataacca tcaccagtgc cctaaacaaa caatacatca aacaaataat acgtcacgta 420

acaagatgtc taggtaggtg tctgccgcct gtttaacagt tccactaggg actcaagctc 480
ttttctttttt atttttttcc ttttactgtc gttaatgtgt tggctttttt ttttgagatg 540
gagtcccact gtctcatcca ggctggagtg cagtgggtgtg atcttggctc accgcaacct 600
ctccctccca ggttcaagca attcttgtgc ctcagcctcc agagtagctg ggactacagg 660
caccacaac cacgcctggc taatttttgt attttttagta gagacgggggt tttgtcatgt 720
tgcccaggct ggtcttgaac tcctggcctc aagtgatcct cctgcctcag cctctcaaaa 780
gtactgggat tacaggcatg agccaccacg cccggcttgg ctttttgact tcatctttat 840
ctcttcatgg ccacaaaata gctgctggat cctccagaca ttgcatctat atcaaggcag 900
gaagaagagg gacagggtg agtttgttaa ttgcctttgc cgtttttatc aggaaaaaaa 960
aagtgttccc agaagactcc caacagattt cctgtaatat gtggccagag gtggtcacat 1020
gcaagggatg ctgggaaaat gaatatctgg ctttctagcc tttatagggg gagggtagca 1080
agagagttag aaatggcagt tgtgtagcta ggtgaccgtg tctgtcccat gtgttagtag 1140
ccactggatt tcttagtgga aagttaccaa tcctctgtga atagcatctc atggggccgt 1200
taatcacaat ggctcacctt tccccagcac tttgggaggc cgaggcgggc agatcacctg 1260
agctcaggag ttcgatacca gcctggccaa catggtgaaa cccagtctct actaaaatac 1320
aaaaaattag ctaggcatgg tggcacgcgc ctatagtccc agctacttgg gaggctgagg 1380
caggagaatt gcttaaacct gggagacgga agttgcagta agccaagatc gcaccattgc 1440
actccagctt gggcaacaaa gcaagactgt ctcaaaaaaa aaaaaaatgt agcttccagg 1500
gcctcagtgt ccagtcagga gaaccgacac caccaccacc acacacatat gcagagccac 1560
agtcccacaa acaggctttt gtcttggacg cacatcccca cacacagccc tgcaaataca 1620
caacgccagg tagaatcagg ataggccaag gtggagggtt tcgagtcagg tgagctatgg 1680
gtttagatcc ccgtgctgct gtgttacct cagtcctttg ctctctgag ctttcaggctc 1740
cccatctgta acatggggat tttttaaat gttatttcta catcatatgg cttatgcttg 1800
gatcgataca ctattcactt ttttaaaaat gattactgaa gacctatgat gcataaggca 1860
ctgttctagg tgctgaagat aaagcaatga acaaaacaga cccaggtatc tctggctttt 1920
tgagacatac agtctactgg aattgggaaa ttcttcttaa cacaaaacct gacacgtggg 1980
actcaaatga attcagaggt tgcaaaccat cggccaacag gcaggtgcgg taccataat 2040
ttcatttgac ccaaacagtg ttttgtggaa ttgttgccag catttaaaca ttgggagact 2100
tttgaaaaca tgggtttcaa gacctcttg agaaatgcc a tgtgatagct ttgattgcaa 2160

ttgccacctg cccataatgg gctggcctgg ggcagccact gccactcacc cagggcagag 2220
agccttagcc ccttcctgac cggcactgct catttatctc acatgcctag gctctggacg 2280
tttgcaaccc ctgagcaaatt atttaaaaat tactagcctg gctgggtgtg gtggctcaca 2340
cctgtaatcc cagcaatttg ggaggctgag gcaggcggat cacttgaggt caggagtctg 2400
agaccagcca acatggtgaa accgtttctt tactaaaaat acaaaaatta gctggacatg 2460
gtggcaggtg gctgtaatcc cagctactca gaacactgag gcaggagaat cactggaacc 2520
caggaagcgg aggctgcagt gagccaagat cgcaccactg cactccagct tgggcaacag 2580
agcgagactc cgtctcaaaa aaaaaaaaaa aaaaaattgc ctgactggat gtggtggctc 2640
acacctgtaa tcccagcact ttgggaagcc atggcaggag aatcgcttga gcccaggagt 2700
ttgagactct gtctcacaaa aaacttcaaa attagccagg tgtgttggtg catgcctata 2760
gtcccagcta ctcgggaggc tgaggcagga ggatcgcttg agcctgagag gtcgaggctg 2820
cagtgagctg tgattgcacc actgcactcc agcctgggca acagagcaag accctgtctc 2880
at 2882

<210> 269

<211> 1986

<212> DNA

<213> Homo sapiens

<400> 269

agccgccccg ctgtccgccc tgagtgcgcc gcggctgccc gagcgccccg cagacgggcg 60
ggtggccgtg gacgcccagc cagcagccccg cagcatggat tcggattccg gggagcagag 120
cgagggcgag cccgtgaccg ccgcaggctc tgatgttttt agttcaaaga gtcttgcgct 180
tcaagcccag aagaagattc tgagcaaaat agccagcaaa actgtggcca acatgttgat 240
tgatgacacc agcagcgaga tctttgatga gctctacaaa gtcaccaaag agcacacaca 300
caacaagaag gaagcccaca agatcatgaa agacttaatc aaggtggcga tcaaaatcgg 360
gatcctctac cggaacaacc agtttagcca agaggagctg gttattgtgg agaagttccg 420
gaagaagctg aaccagaccg ccatgaccat tgtcagcttc tatgaggtgg aatacacctt 480

cgataggaac gtgctctcca atctcctgca tgagtgcgaag gacctggtgc atgaactggt 540
gcagcggcac ctgacgccca ggaccacagg gcgcatcaac cacgtcttta accactttgc 600
cgatgtggag ttcctctcca ccctctatag tctggatgga gactgtaggc ccaacctcaa 660
gaggatttgt gaaggaatca ataagttgct agatgagaaa gtcctttaa tgccttcct 720
cctactggac tttgctgctt taaagttaca gcactcaacc atgatctggg tgagaatcaa 780
gaacataagc agaaaccctt gtcaaagatg tccatgttct ttcctgttca tccctctgat 840
gctgattctg atgctgaact gagctcagggt gtgtttttct tccaagcttt ctagcaagggt 900
ttctacttaa aatcacctgt gtgcaagccc aaaggacatt tcactattc taagcagaaa 960
ggctgttttg ttcattacag tgagtgtgtg tcactctatg gaggggagg agcactaaac 1020
caggagacag aggacatgga tttggtttcc agcttaacca gttaggactc tgctctctgc 1080
attctggaac catgatgcct gcctgcctgc ctcacagggc tgttgtagagg accagatgag 1140
atgatgtatg ttcatacttt tggaatctct aatttaaagt cttaatattt tgtcttctga 1200
gtgtgagggg ataaacctgg atgtagacta ttaagcagca taggagaaaa gaacaataga 1260
atctaattga ctgggtttgc aatctctctc taaatgcact gcttcagaca aagtgaatc 1320
caaagggtgtg aaaaagtata gctgcaaatt ggaaaaatgt gtttcaagag tcgtcttttt 1380
ggccaggcat ggtggctcac acctgtaatc ccagcacttt gggaggccga ggtgggcaga 1440
ttgcctgagg tccggagttc aagatcagcc tggccaacat gatgaaacc tatctctact 1500
aaaattacaa aaattagcca ggcgtggtgg tacacgcctg taatcccagc tactcaggag 1560
gctgaggcag gagaattgtt tgaacctggg agatggaggc tgcagtgagc tgagatcacg 1620
ccactgtact ccagcctggg caacagagca agactctgtc tctaaaaat aataataata 1680
ataataattt ttttaaaaag aggtgttttt gaggtcttag atgttcagggt tgatgatcct 1740
gcagagggaa actttccatg ggggggtggg gagagagagt tttccatcca caatatagaa 1800
acagagaagc actgtgctcc ctctgcagga ccagccttcc cttatctaag gggcatggag 1860
ctcagggagg ctttattcca tatgcacggg agaatcaggc agaatgaacc cctaccatc 1920
tttcttggct tttcagtcac tttgtgtgtg tttctctggt tcattaataa attgaaactg 1980
ccctcc 1986

<210> 270

<211> 3159

<212> DNA

<213> Homo sapiens

<400> 270

```
ctacagtagg ccttcttctg tatctggctt tattcagaca gcaggatgtt tatagtattc 60
atcgctgacg ttctgagtat caatatcaat agctcggtcc ttcttgcagg gtaatagtcc 120
attgtgtgca tatggaacat gctcctcctt cccctgcccc aagtgggcac tgggttccact 180
ctgcttaact gtttgaaaaa ccgtcagact gttttctgaa gtggcggcag cagcttccac 240
gccacccgca gtctcaggct tcatttcttc acatcctcac ccaaactggt tctcacctgt 300
ttttactgac accgtccccg cgggagtgaa gtggcgtctt gtggtttgga tctgtggctc 360
cctcatggct gatgggtgctg agcactctgt cgtgtgcccc gtgcccgtg acgcctccct 420
gggagcagcg cctgtgcagg cccctgcccc ctgttccgct cactttcagg gccggtagcg 480
acgtggttgg gtgcaagcca acggttgtcc ttcttcccct catctgttat ttgttctgtt 540
cttcctttct tgccctcttt tgtattgaat atttttatgt tcaatttaac cttctttact 600
gtttttaagc attatatattt tgttttattt ttcagtgggt gctctaagaa ttgcaatatg 660
caaccttaac cgatcacctt cctccttaac taactatgat actgcttcat ggatagggta 720
agaagcttac aacagtatca agtgtggtac tcccaataat acattcttta agatttttgc 780
ttaagcagtc aatgatcttt caagaaagtt aagaaaaatt aagaaactgc ccatatattt 840
acgttttctg gtgagcctca tttcttctta aagaccaggg gttctagctt gcattttttc 900
ccagtagacc tcacctgtgc attcctcagg cgccagggtg cacgtggtga tccccccat 960
caccacgctg gaaagagcag tgaggccggc tctggtgctg gcgtcttatg ttgccaatga 1020
cactgcctgg ccccatccta gctccttctt tccacaggca caggtaacag catcatggtc 1080
atgaaaatga atggatccct ccatcaagaa ttgaagattg aggagaactt caaagacacc 1140
agtacctctt tcctggcctt ccagctcctt cctgagggtat cccagcaggg gctgtgggcc 1200
cagcatgtgc gtggccccgg gcccatagcc cacaccgtgc cctgcgtttc aggaggagca 1260
gctgtgggcg gcctgtgcag gacgcagcga gggtttacatc tggagcctga aggacctggc 1320
ccagcccccg cagagggtgc ccctcgagga ctgctctgag atcaactgca tgatccgggt 1380
gaagaagcag gtctgggtgg gcagccgagg gctggggcag ggaacacca aggggaaaat 1440
```

ctacgtgatt gacgccgaga ggaagaccgt ggagaaggag ctggtggcgc acatggacac 1500
cgtgaggacg ctgtgctcgg ctgaggacag atacgtgctg agtgggtcgg gcagggagga 1560
ggggaaagtc gccatttga aaggcgaata aacgtggctg agtctgccaa gtggaactgt 1620
gccctatgtg tggggactgg ctgcccccta gagcctgcc aaggagcagaag cctggagggg 1680
tggcagggca gagcagccca ggctcagcat ggagcccact taccgtgtgg ccagccgcga 1740
gacccatggc cacgcacctt ctctcaggcc ttcgggcccc ctggttaaac tgcaccaagg 1800
gtgtttcctg ttgggggtgtg tctcaggcag gcagctgcgt cttgttgggtg ataacctctg 1860
ctgggaggtt actttgttgc ctagaaagtt ctggaatcca caaccagggg ctggcactgg 1920
agccagcagc ttggccgagt cacaggtgac ccgtggccct cacgtctctg gttttacctt 1980
tccttacttc attcattcac tcaccagtc cttacgaatc accgaggaac actgggctga 2040
gcacatgaca gggagcctgg agccccgggg cctccagcga ggcctgagaa ggggtggttcg 2100
ggtaaccact gtgggctctc tcccatcaca gaaggtggac agggcctacc caggtggagg 2160
ggaccaccct gcgatcaggt gtttgcgaca ggggttgggc cagctgaggc aagctgtctt 2220
ttttttccct tttcttttta atagatgcaa catttttata ataatcctag agaccttttt 2280
tctaccaaag atcacagacc agaaaaagtt ccatctaaaa tatcatgccc aggaaagcac 2340
atgggatcaa aagtaaaata gcatcatgtg tgatctcgtc ttccagcgtg ccgctcagtt 2400
ccccgaatcc gtgtgcacac gtgtgatctc gtcttcagtg tgccgctcag ttccctgaat 2460
ccgtgtgcac actgcgtatg tgtacgcgca gcatgctata ctgaactcaa caagatcttg 2520
gctgtacata aatatttgta aaagagaccc ttgacacctt ttactgtaa tgttgagact 2580
tcattactta aatgttctac ggaaggttct ggtgtggttg ttggagccgg agggagcgtg 2640
tcagcacgtg ctgagggcat ggggcctgcc ccctgggcac ccatccaca gctgggccac 2700
ggagctccag cttctcagga caaagccccg gggctggcgc atcctgaggg tctctggggg 2760
tgtttgccag gtcctggga tgggccgctt tcagaagccc tgcagtgcct ccagatggaa 2820
aggcgggccc ggcctccggt tgggtctgca ttttggagag tccacaccac ggaccaggtt 2880
ttcccccaag gcttggcttt gtgtagctac taacttcttg gggcattctg agagtgtggg 2940
cagagagaat tatgtggcct catctcccc caaggtgtg cttgcagccc gggcaccttc 3000
ccactttcta gctctggaga gggttgattt tgcttttgta aacacatgaa tccttatgat 3060
aaaagtctgt cagtcaaaaa tacatttata aattatttaa tgccagtcct catgtaacct 3120
caggtatctt cagcttgtgg agaataaatc tggtttaat 3159

<210> 271

<211> 2359

<212> DNA

<213> Homo sapiens

<400> 271

```
atttctgatg atgttttttg ttcaccaact gtaattcaag atggtggctt atttgaggct    60
gcacatgtac tttcccctac tcttcacaa tatcatccaa ctcagctggt agaattgatg   120
gatttaggga aagtgcgaag ggctaaagcc attctctctc atttagtaaa atgtattgca   180
ggtgaagtag caatagttag agatcctgat gctggagaag gaactaagcg acatctctct   240
cgaactatta gtgtaagtgg cagtacagca aaggaaacag tcaccgtagg aaaagatggg   300
actcgagatt atactgagat agattctatc cctccactac cactatatgc attacttgct   360
gcagatcaag atacatccta cagaatttca gaagaaagta caaagatacc acagagctat   420
gaagatcaga cagtaagtca accagaggat cagtattcag agctgtttca aatccaggat   480
ataccaacgg atgatattga tttagagcct gaaaagagag aaaacaaatc aaaagtaata   540
aatctttctc aatatggacc agcttacttt ggccaagaac atgcaagggt actttcaagt   600
catcttatgc actcaagtct accaggcctt acccgtttgg agcagatggt ccttgtagct   660
ttggctgata cagtggctac tactagtact gagcttgatg aaagcagaga taagagttgc   720
tcaggaagag atacattaga tgagtgtggt ttgagatact tgttagctat gcgcctacac   780
acatgccttt tgacatcgct gcctccttta taccgagtgc agctacttca tcaagggtgc   840
tctacatgcc attttgctg ggcttttcat tctgaggctg aagaagaact gattaatatg   900
attccagcaa ttcagagagg ggacccccag tggcttgaat taagagctat gggcataggg   960
tggtgggtga ggaacattaa cacgcttcga agatgcattg aaaagggtgc caaagcttct  1020
tttcaaagga acaatgatgc cttagatgct gcactattct acctttcaat gaagaagaaa  1080
gcagtagtgt ggggtctggt taggtcacag catgatgaaa aaatgacaac atttttcagc  1140
cacaacttta atgaagatag atggcgaaaa gctgctttga aaaatgcttt ttccttactt  1200
ggaaaacaac gctttgaaca atcggtgctt tttttcttgc tagctgggtc attgaaagat  1260
```

gccatagagg tatgtcttga aaaaatggaa gatattcagc tagccatggt tattgcccggt 1320
ttatatgaat ctgaatttga gacttcatcc acttatatat ccatacctaaa tcagaagatt 1380
ttgggttgcc aaaaggatgg ctcaggattc agttgcaaaa gattacatcc tgatcctttc 1440
ctgcgtagtc ttgcctattg ggtaatgaaa gattacaccc gagccttggc cacattactg 1500
gaacaaacac caaaggagga tgatgaacat caagttatca tcaagtcttg taacccggtg 1560
gcatttagtt ttataacta ccttcgaact catcctttgc tcattcgaag aaatcttgcc 1620
tcccctgaag gaactttggc aaccttaggt ctcaaaactg agaagaactt tgttgataaa 1680
attaacctca tagaaagaaa attattcttt accactgcaa atgctcattt taaagttgga 1740
tgccctgttt tagccttgga ggtactctcc aaaattccaa aagtaaccaa aacatctgcc 1800
ttatctgcaa aaaaagatca gcctgacttc atttctcaca ggatggatga tgtaccttca 1860
cattcaaaag ctctgagtga tggcaatgga agttctggca ttgaatgggc aaatgtaact 1920
tcatcacagt atgactggag tcagccaata gtaaaagttg atgaggaacc tcttaatctt 1980
gattggggtg aagatcacga cagtgcctta gatgaagagg aagacgatgc tgttggttta 2040
gtgatgaaaa gtacagatgc cagggaacaa gataaacaat cagatcagaa ggcctcagac 2100
cctaacatgt tattaacacc tcaggaagag gatgatcctg aaggtgatac tgaagttgat 2160
gtgattgctg aacaactaaa attcagagct tgtttaaaga tccttatgac tgaattaaga 2220
acattggcta caggttatga agtagatgga ggaaaactca tacacctcct atgaaaaaac 2280
ttcctaccac tcaccctagc attacttata tgacatgtct ccatacccat tacaatctcc 2340
agcattcccc ctcaaacct 2359

<210> 272

<211> 2815

<212> DNA

<213> Homo sapiens

<400> 272

taaaaagaga tgcaattttt aagagaaaaa caacaatgat aattggttgg ttcagatggt 60
ttctgtcagc taattaaaaa gtgaggcctt ttatcattct gtttgagcct tgttctacta 120

taagcagggt tcagcagaaa agcaccatgt tttggagtta gttgagcctg gatttgcac 180
ccagcccttaa ccacttatga gttaggtgat gctggacaat tttcttaact cttcagggt 240
acttcatagg attgttatga agattatata agattatgcc aataaaactc atgcctgagg 300
aagtggttgc tccctttcta tgggtcagta ttggtgcaag aactggaaac cagcccttgg 360
agaatagtta tacattggcc atgattttcc acagccctgg aaatgcacaa ttctatcctc 420
ctaccaggat gattgttaag ttttagctaa catttgatta taaaaggccg taagtatgag 480
tatctctgag ataatttgtg tatttgaaag aggtgtgtaa tagcactttt ttaaaaaaac 540
ctaggtgtga aggaattaca agtccagaag gctcaaaatc tatagtggaa ggaatcatag 600
aggaagaaga agaagatgag gaaggaagtg agtctataag caagaggaaa aaggaagatg 660
acatggagac caagaaagac catccataca cctggagaat tgaactggca aaaacagaaa 720
aatactggga cggctgggtc cgaggcttat ccaatctctt tcttagttgt cccattccta 780
aattgctgct cttggctggt gttgatagat tggataaaga tctgaccatt ggccagatgc 840
aagggaagtt ccagatgcag gtcctacccc agtgtggcca tgcagtccat gaggatgccc 900
ctgacaaggt gagtctggtg ctcagtgact gtaaaaggac aactgtgaga ataaccctgg 960
atgtcacaga agacaagtct ctgagtctca gcctgcattg cctgcagcag ctgctgtgga 1020
gcctatgcag atgcagttcc accagctctc cgacttctcc ctggcagctg cttatggtat 1080
tggttttgtg tatatgtgct gaggagctac tgacactctg ctatttcac caggggccct 1140
gtggttaaga tcttaagctc tacttctcca ataccccaa aagccagaga tggaagaggg 1200
atgattgggg tagaaactgc tccctaaacc acaggcacag ttaggaatta atatgggctc 1260
ctcctgtgag aaaacacat tctgtaactc tgagggcaca cataagccct tcacgtcatt 1320
cctcttgagc tctatggagc tatccctggc aaggatagtg gggaggagtc ttctagctct 1380
gctagggagg gcctaggtcc ttttaatttc aagccactca gacctgtggg tgggatgagg 1440
gcaccgtaga gcctaaccat ctaacagtag ctcacagccc aaggctaagc cccatcacta 1500
acctttatat ggcctggaat atctctccca ttccaggta gctgaagctg ttgccacttt 1560
cctgatccgg cacaggtttg cagaacccat cgggtggattc cagtgtgtgt ttctggctg 1620
ttagtgacct gctgtccacc cctctcaac atcgagctct gttgtaaata cgtcgcacca 1680
gaggccactg tgatgccact gtctctctc catcccgcc agccatgtga cactggctcc 1740
cggtagacgg gcaccccgag atgtaccaac cttttcatgt attctgcaa aagcattgtt 1800
ttccagggcc cttgaccaac atcggtctcc ccagtccagg gctcccctgc tcctttccct 1860

tccctgtact ggggtagctc ctgcctgctc tccctgcgtt gcctagggtta aagcctccag 1920
 atttgccata ctgggcccct cttcctagca tcaggcgata catctgagtt caaatgtctt 1980
 cccaggctca gggacctcca ttccttgaga ttgtcttggc atggcccagc cctgcctcat 2040
 gggatggaca atgcatgggg tggcttttat tttcccttt caaataaaac actagtcagg 2100
 taccgtttta tcccagtcgt actcttccag gtttgaaga cccagagagg ccaagatccc 2160
 atccttagcc atagcgagcg gtggtggtgg atagcatcac aagaaacgag cctgaaaatc 2220
 aggtccagcc ggtccaagca catggcctcc catctgggag agcccactgt cccactccca 2280
 catgtctggg cacctgccct gggctgaggc caggctgctc caggggcctc ctgcgcctc 2340
 acctgccaca gagcaacca ggttaaatac agcccatgca caaagccaca ggccaaagcc 2400
 tatggaattg tttttaatca tcaaatttaa ccattttcat aactggttcc tggaggtgtg 2460
 cagtgccttc ttgcctcttc aaacctacag cttctctttg ccatttgtgg atttcacatc 2520
 actccacaca gaaacattac agcctggcat cccagctctt tgccttcttc cagctgcctc 2580
 gacacagcac tgtggcctgt ccctattgcc caggcacgcc attccaagg gcaggaaggg 2640
 gcagtgtcct gaagcccatc ttttctgtga ctgtcttagg tgatgtgtag cccctccac 2700
 ctttccactc aacaacctcc caccctgtc ctgctgcatg gtccggagtc tgggacctac 2760
 tttgtttttt gttatttatg acctgtttta aagaaaataa atatctccca acctt 2815

<210> 273

<211> 2810

<212> DNA

<213> Homo sapiens

<400> 273

acgatggaga tgagcggcac ccgcgggcgg tcgctgaaga cctcggcctg ctgcaccagc 60
 gcctcgcgca cgctgtggaa gtcgtgagg accaccacca ggtagtggcc gataaagaag 120
 ctgaagatgc tgccgtacac gcgggctaga gccccagct atcaatacat tacagcagga 180
 tgagaaagac ccaggccttt gacatcccag gctttgacag gccaggctt gacagtgtct 240
 tggcacaatg ttgtgggaag aataagcaca atgaagaggt gcctcaggaa ggtattttca 300

acaacaaacc ttcaacacca tgaactgcta cttctaacgg aggtccgaag cactaacaca 360
gccatttcct gtctctcttt agcagccttg cctaattcac ttacagcatc ttgccaaatc 420
atcatccaaa ttcccttcaa ctttactctt ccatatgtgc tcctagtctt atgttcatgt 480
gggaaagaag cttgtgattt tgaaactcca ttccacagtg gatgtacaga tggctctttat 540
aaggtagcta ctcggttcta gaacacagaa tgtggaacag aagaaaatcc aattagtaac 600
cttttttcct ttttttttcc aagaggacac actcagccac ccacctcatg ggactgctat 660
gagaatgact gaaataatta attgtgaaga gctttgtgcc cctgggagta agaacactat 720
gacacaactg gagaaactgg ttattttacc aaggcttagg ctggaatggg gtgctttcct 780
ttaaagaatc aaacttgact tatggagcca ataaaagcct cttgggaaaa ctggcctcat 840
acatgtctac acagtccttg tatagggttc ctgacctgtg atatattata aaacaagaaa 900
tttagttcca atgtatccaa gctgtccctt cggaagggtga tcagaagaga gaaatgagtt 960
tgggaaagaa aaggaatagc tgaacaagag caagtgattt cagaaatcta aaccctgaga 1020
aaacatgggt aacagagaag aacttttgct gtgatatcta cttctgcagg gagtagagaa 1080
acagaagtag aaggtaaate tgagatgagc acagagatat caagtgaatt gcccaaggtc 1140
accaactagt aagcagtga gccagcattt ggtactttgg tagctctgac tcggcaggct 1200
gttctacccc tctttgggaa aagcatcgca aatgagcaca cagcttcagg gtgaattctt 1260
acagcaaaga aaaggaaatg ggatagcaca gccctgctat gtcagaagaa ccaacatcag 1320
acatcagtgg attctcatag caacatctcc ccaactgttc ctcttgacac acaggaaaaa 1380
tgttccagaa tcaactggga agactggcat ttcatattata aatgtaattc ccaggctggg 1440
tcggtaactc ctccaatctt tccaattacg ttcatattcag atatagggga cagaaatgct 1500
ccagaaaaga actagaccat atttggagga ggagagaagg agtacaccct tcattctgtgt 1560
tgtgaactat gtggaggaga gtagtatgtt acagtacaga gactcttggg gaggccatgt 1620
gcatgtgtct tcaggcctcc atctcctttc aacttgagga gctctgcttt tccttctatt 1680
ttagaggggt tacccaaaat ctcatctgaa atctgggttc catggctaaa gaagttttaa 1740
aactgatagt gccatgacaa agccctggat cagaagtcac gaaacaagaa tccaagaatc 1800
tctctctcag tttggccaca aacaagtcac gattaatcct gggccaacta cttccttggg 1860
aaacaccacc atctctcagt cagcaaagac agaaccagag agagagactc tgcaagttca 1920
ggaagaaagg ttccaactac ttttactctc cgttgcattc cctaattgtc ccactttctc 1980
agagcagggt ttagtcacta ctacaaaaca ttgctcagga actgcagagc cactagcctg 2040

gcatgtggtg acacattccc aacacaattc tctaacattc tgatttcctt tgcaaagata 2100
 aattcaagcg aaattagaac tcttaaagat cagattgaga ttgaatgcca ttggctttct 2160
 ccccatacct atgctcctac acatctcttc agcccagcac agggttttta aagctcactg 2220
 cttaacacag ggctatctcc tctgctgggt atgagctgca aggatagagt ccatgtcctg 2280
 tttgtgttgg tgttcctggc cactagccaa gaacctgcag cccagcccta gaatagcagt 2340
 tgaatgaatg tggcagccca cacactcaaa gacaccagaa ttatcttacc ctttcccaga 2400
 gagcttcagg tacctttctt ttcctaaatg agtcactaat gtgtctgtat aaatatgggt 2460
 tccatatatg tcacagagcc caaacatttc atctgactta ctgtgggtta ctttttgtga 2520
 ctgcattttt attatatctt atataaaaag ggggatataa cagaaggaaa aaacagtaaa 2580
 gcaaaaaccc atatctagct tcagagcatt acatatccac tggaagccct aaagcaatgc 2640
 tccatgatcg catggccttt ccgctgcata accctgaggt cttttttga tacataattc 2700
 tcaaagtatg cagtgcgtgaa agaccttgaa gagctttctt aatgatgtt atggttaaaa 2760
 tttctatgat tgcagtcctt gaaatcataa aagaataaat acatccttgg 2810

<210> 274

<211> 2716

<212> DNA

<213> Homo sapiens

<400> 274

ttttgcatta gctgctctag caaactgcgt gcgcgcgcac acacacggat gcttgttttg 60
 cagaagcttt ctgtttattc agcacagagt tctcctaggc tcccagatat agaaagctct 120
 aagagttgct acaggagata gaattgaaac tatacatagg ctgaggtggg cactgcggag 180
 gattggctat gcgagggtat taatgtggtg cggctgtacc tgcctgtttt gtgaaagtca 240
 cttctctgag actgtgaagg tgagaagccc agggatccac tagaagcttc actgcggctc 300
 tttggtgggg gaaagcattc ccagtggtag ctgtcctcat ttgcagcggtt attctcgga 360
 accaagtatg tgcagcagtg acagactatg ccacagctcc tctgcagttt ggaagctgga 420
 acaaatggaa agagcttata gccaaagagag gctgtgattt tttttttttt accatccaag 480

ctttctctgg cagtgcacaa atgaaggatg agctttgtgg caagcaaaat cagcagactg 540
cctgacaggg ggttttgatc gaacggttgg aagtaagcag ccttgcccaa acatccagtg 600
cagtggcctc cagtaccgat ggcagcatcc acacagactc tgtggatgga acaccagacc 660
ctcagcgcac aaaggctgcc attgctcacc tgcagcagaa gatcctgaag ctcacagaac 720
aaatcaagat tgcacaaaca gcccgggacg acaacgttgc tgaatacttg aagcttgcca 780
acagtgcaga caaacagcag gctgcccgc tcaagcaagt ctttgagaag aagaaccaga 840
aatctgcccc aactatcctc cagctgcaaa agaaacttga gcactaccac aggaagctca 900
gagaggtaga gcagaatggg atcccccggc agccaaagga tgtcttcagg gacatgcacc 960
agggtctgaa ggatgtagga gcaaaggatga ctggcttcag tgaagggtgtg gtggatagtgt 1020
tcaaagggtg gttttccagc ttctcccagg ccacccattc agcagcaggc gctgtagtct 1080
caaagcccag agagattgcc tcaatcattc ggaacaaatt tggcagtgc gacaacatcc 1140
ccaacctgaa ggactcttta gaggaagggc aagtggatga tgcggggaag gctttgggag 1200
tgatttcaaa ctttcagtct agcccaaaat atggtagtga agaagattgt tctagtgcga 1260
cttcaggctc agtgggagcc aacagcacca cagggggcat cgctgtagga gcatccagct 1320
ccaaaacaaa caccctggac atgcagagct caggatttga tgcactacta catgagatcc 1380
aggagatccg ggaaaccag gccagactag aggaatcctt tgagactctc aaggaacatt 1440
atcagaggga ctattcctta ataatgcaga ccttacagga ggagcgatat agatgtgaac 1500
gattggaaga acagctaaat gacctaacag agctccacca gaatgaaatc ttgaacttga 1560
agcaggaact ggcaagcatg gaagaaaaaa tcgcgtatca gtcctatgaa cgggcccggg 1620
acatccagga ggccctggag gcatgccaga cgcgcatctc caagatggag ctgcagcagc 1680
agcagcagca ggtggtgcag ctagaagggc tggagaatgc cactgcccg aaccttcttg 1740
gcaaaactcat caacatcctc ctggctgtca tggcagtcct tttggtcttt gtctccactg 1800
tagccaactg tgtggtcccc ctcatgaaga ctgcgaacag gacgttcagc actttattcc 1860
ttgtggtttt tattgccttt ctctggaagc actgggacgc cctcttcagc tatgtggaac 1920
ggttcttttc atcccctaga tgatgctggc acagaaggca ttgttccta ccctctggcg 1980
agtgcattga gcagagagtt agacagcaac ttacctactc tgaagttttc tacaacaaaa 2040
aaagagtga gtgaatctgt ttacatttag aataatgttt ttttcttcaa gagacgcaat 2100
tgcaatagta ttttttagat tttatccaag aagttttttg ggcgaaaatc ttggatcatt 2160
tttatgtagc atgattttcc ttgggatgca aatcttaaaa cagtccttta atatgaacca 2220

acaatctgga gcacaccgaa gggcaatcta aattgtggct tgaaggactg cactaaaacc 2280
 cactaaaaag atgcgaaaac ctgatgaggg caaaccagtt aaacctaaaca ccctgccttg 2340
 tctgggctca tcacctctcc ctatcccaga ctaactttac tgtgaaatcc taccacattc 2400
 catgtctgaa tttttggatt cggggtggat tttcgttgtc cgtggaagaa cacatggatc 2460
 tctctggctt tctcacccaa gttggccact tacgctaatac ctggaagtat gatcactttt 2520
 gaacctgccc cttaaccttg acgaggatac aaaagtgaga gcatcatccc ccaaaggatc 2580
 actgcacagt cctactacag tatttttaag tagccctcta aatacttaat ttttaagcaaa 2640
 atcccttggc cgcactttta aggttttttt atatgtgtat agttaccaac ctaaaaataa 2700
 aaaatccgaa cagcat 2716

<210> 275

<211> 2344

<212> DNA

<213> Homo sapiens

<400> 275

aatctgtatg acaaacctgt acatgtaccc ctaaagttga aacagaagtt aaaaacaaaa 60
 cacaaaaaac atgatcctga gttctttcaa tggcaacaat ccagtttaat tggtaagtt 120
 ctaatggtaa gtaccacatc gtttattgct tgtttcttaa tctggccacc tgctcggctc 180
 gtgatggagg gtgtgcattc tccaggcagt gtaatagtac ccatccttta tgaagcatgt 240
 ctttggtcgg gccctctaac tgtgtttatt ttattggatc cgtacagccc aataagacag 300
 gtcttacctc taaggatcaa gaacaagggtg tcagaggaag aggtaggaaa atataccata 360
 gtgggaatct gtgccaagag gagtcatgag aagaggtttc tgcaccagcc taggaaagtt 420
 gagatgagtg cccttaggtg atcccgtgca agggaggcac cgccttgggt tgtcagtcac 480
 tggaagccgc cctagccaca gaaatatatt gtcagatttc caacagggtc atggcaactg 540
 agggcatagt ctgtaggcaa tggacatggt attcgactca gtattcttgt ttcgtttatg 600
 atacaagggc acgttttcca gtaagttcta ttctgagaga gtgagcgaga aaggacggat 660
 ctcccgggtg actggcttcg gagcagatgg gacacagcag cttctgaaag cctcctggtt 720

ctcctgcaaa taaatttctc agatgcatat atttagggaa acaattcatc aatgaagatg 780
acaaaaccat ctggctctag agacttaaaa aaaatttttag aggttgtaaa catttacatt 840
ctgatgaaga gtgtgtgtct aggttttatt tcaaggattt gatgagtttg gtttgtggct 900
tgtttttagg gattttttta cctggccctg ctaatcgagg aaggtacgat aatcccacac 960
catatcttgg atttcttggg aattgactca actctccatt ctaataacat ctccattctc 1020
caggaactgt acgaaaggtg ctggagccac agtaacgagg agtccttcag cccctgctcc 1080
ttggcctggc tttacctgca cttgcggctt ctctgggggtg ctatcctgca ctcagccctg 1140
atctactttc tgggaacctt tctgctatcc atattgatcg cctggactgt gcagtatttc 1200
cagtctgtct cagcaagcga tccccctcca agaccatccc aggctcccc agactctgcc 1260
acgtccactg caagtccagc tgtgactcca gctgcagatg cctctgacca agaccagccc 1320
acagtaacta ataacccgga gccacgtggg tgaactgtgc actccagttc tctccagatg 1380
agagagaatc ttttcaacag ctggtatttg gaagctgggg ccagggcagtg atcctgataa 1440
acaccttaaa tgtcttgtca actggatgca aattttgcaa ttggtgtcat tttttttaa 1500
gtcaaattac aaggaagtac ccagatcagg cagtggtaat accaaaggtc atcaaacaca 1560
tacaaggaac atcttgatca tagggcatgt ggggaagttt actgggccat cacagacttt 1620
tgttctagtg attgtatgta ttaggagtca tagcatgccc tacggcagat ctggattctt 1680
atacactaag atgtgtctta agaatcacag tgcgtgcttc atccctttat tgaagaacag 1740
aaaattatga ctactctaca aggtggataa tattttggtg cctgtgcttg ccacagccct 1800
gttcctcaaa gctgaattga tagatttctc tttgacttcc aagacctagc agttataagg 1860
caccttgaaa taaattgttt gtgcctggaa atgcagggag ggcaatagct ttgtaaattg 1920
gtttacattt ttctccttga atttttctag ggtcctagtg cttccgaatc atttaatggc 1980
attgtcggat atcttttaca tttcaattgc aatccatgaa attacattta gaagattctt 2040
agtacttaac tgtagtcttc tccatgaatt acacgttaga atagactggc agcaactgaa 2100
tatgcagcaa gtaagcctct agcttatagt ttcaccccta cccctcatgc ctgcgtgagt 2160
ctgtacaggg atatgtgtgt gtgtgtgtgt gtgtgtgtgt tagagaggaa gaggaagagc 2220
agaatgtctg tatactacat gctgctaagg tagtgaataa atcagtaatg caatattgtg 2280
ggcccaaact actctttgca ctactttatt tacagtagta aataaaatta tttttataca 2340
attg 2344

<210> 276

<211> 2154

<212> DNA

<213> Homo sapiens

<400> 276

```
attcaggtcc tctgatacac cagccacatt tcaagagtgt aagagtccca cgtggctagt    60
gactgtcata gaactttcca ccattgcaga aagttctgat ggacagtgct ctaggatgta   120
gctgtggcac cccagggtct tggggctcgc tgtgacagtt actcctcttc tgtccccac   180
tctcagctgc acctgcagat gctgctgctg ccgccctcct gcgaggccgt ggcgccacgt   240
ggctggagga ggagctgcag ctgccccgag tgctgccgcg tgtgcagctc tccagtgcgg   300
ctgcagcgcc accgcgcgtt gctttcgacg ccggagtcct tcgcatgcgc agccagcgcc   360
cgggcctcaa gtgccccagg acctggcgca gcccgcgagc ccgcatcagg cttccagtgg   420
gccccgtggg cagtgccagc ctttcccacc tccgcatctg gcaaagcctg gccttcgctg   480
cgcttcggtg tcgccacatg ctttctggga atatcacacc tccccacctg cgcatgcagc   540
cgtctggccc tctgtgggcc tcggttcccc catgtgcccc gtggaaagaa cataccttc   600
ccaactatct ggcagcgtct ggccttctcc gggcctcggc ctccccattt gctgggtgga   660
gaatcacggc ccggccacat cggagccaat ggctggtctc tggacctcgg tctccacatt   720
tgctcagccg gcaggaacat cccttctccc gccctctacc tcggtgggtg gccacggccg   780
agcaggcagc gacggcccag tggaaagagg acaaaccctt gtgggcctta gggcgaagac   840
gtaactttgc ttagtctcgg ttatttggcc gatctcttgt caagcggcgg aatcgttccg   900
ttcgggaggt gggaggggag cggggccgcc gggggcgggc gtcttcagtg gacccacgc   960
ctccggtccc ctccccgcag ggcgctccgc agaggcgagg ggtgggagcg ccggctccag  1020
gcggcggaac ctccgcactg ggctcgcgcg cttccggccg gcgccttttc ccagggactc  1080
cgccaacccc tcgcaccccc gcgccccag tccccgcgtc cccggcgccg ccggcccgga  1140
gctgcccgga agtctcggtt ccgccgccgg cgctcgccag gggaagcccc gggccgcccg  1200
ggacctcggc ccgttctctc ggacccgaga ggccgccgca cggggtacgg gggccgggat  1260
ggagggagga gcctggccct gggacgacgc cggggccagg caggctgggg gagtgcgctg  1320
```

gagccacccg ggatgggggt gggggtcggg agcggcagga tcgggcggag ggacgggagg 1380
 ggaagtcgag gcgccagggc tccttgggga agtgaaggca ataggagggg cccaggggcc 1440
 aggggacagg cgtgtgttag cgggatgggg gcgaaaacgc ccgggcgctg gggttcccat 1500
 aaacaagggg agcagagcaa aagaacgggc gggggaccac gctgtgtgta acagggagag 1560
 ggatggggct cctggaagag gtgaacacga ggagaaagag agatgccaga cgtacacaga 1620
 aaggagggga aagtgggctt gggagaggtg ctgtgggaag cggagtcccg gagcctggtg 1680
 tgcataacgg ggtttgggag agggcccctg atgggtacag aaagaagtaa cgatgtcacc 1740
 gccatatatg gggggcgaga gaaaaggggg cttttgggga gaatgtagca ggtagccagg 1800
 ttgggggggc ggggtataca gaaggaaggc atttgagcca ttttggggtg tatagatgta 1860
 gtaagacgat gggttccgta gtggggagag gtgactagac ttcgaggtgc taagttagg 1920
 aacaggatgg aaaagcccta gtgaaatgtg gggaattggg ttagtggggc tctggggagg 1980
 tacctagaga ggaagtgagg gaggccacgg aatatgaaga tggggaggcc ctgcggcatg 2040
 tagtggggac ggagggccag gaggccgata cgggggccgg tgggggggta gggggcggca 2100
 aaggggggg aagtaaactg aactggggct gggcaacagg aaaaaaaaa aacc 2154

<210> 277

<211> 2431

<212> DNA

<213> Homo sapiens

<400> 277

ataggacctt gccatcaat gttcagtgtt ccttgttggc taacgttcac cagggtgcaa 60
 atgttgggtg atatataatg tttatcatat gaatgacagc ttccaccaat gaccaatatc 120
 cacaaaggga aatgtctgt tggaggcagt gtctgtgta tatcagtgcc cagtgttcac 180
 tggtagctaa ttgcaattat acttgctctg tgcatacata cccaatgtca gtccatagct 240
 cggcttctaa cgacagcaaa tgtctatcca gttaagtcac atgccctgtg tttattcttc 300
 tctttattta ttttaagtact agtggttctg tctacaggga ttattgtgtt tggtgagctt 360
 ggaggggaaat tccccctgtg tttattcttt agttcccaaa cctatttatt attttcttt 420

gcataatccat tagatagtca aagtgttctg aactggaggt acaaacacat tcatgtttct 480
ttttgtctcc ctccctccc tccctccctc cctttctttc tttctttcta tctctctctc 540
tctctctttc tctctctctc tctctctttc ttttttcagg gtcttattct gtcacccagg 600
ctggagtgca gtggcgtgat catagctcac tgtagccaat ctcccatgca caagcaagcc 660
tcttgcctca gcctcctgag tagctgggac tacaggcata cgtcaccatg ctcagctaata 720
tttttaattt ttagtagaaa aggtctgggc ttgaactcct gagctcaaga aatcctccca 780
cctcagcctc ccaaagcggt gagattacat gtgcaagcca ctgtgccctg ccatgtttct 840
taatatatgc acatatgtat atgtaacaca taaataatta catacataat acaggaagac 900
acagaaataa ttacatacat gatacaggaa gacacagaaa aagagaaact ggtctgatac 960
cagaagtatc aactcaggaa caattttcta ctagctgagc ctcagaagca gcaacttttc 1020
caaagtgaag tgatgaatgg aggcgccagc cctcctcctc aggttaagaa aggcaaagag 1080
ccctgctttt ggctgtaaaa agccagggtc cctaatacagg tgaaggcctg aggcagggac 1140
tccttagggc agtgtaacta gtagccaagg cacaggctcc aaaggagggt tgcctgggct 1200
ctagccccggc tctgccactc acagctgggt gtccccggggt gagcctctca gccctcgtt 1260
cagcctcagt tccacatgtg taaatggagg tctagtagct acctcacagg gcagttgttg 1320
aaaataagct aatgctccta aaaccctgag aacagtgtc tgtgtatgat aagtgttcat 1380
agacgtcaca ttattttattt attttgaaaa ttcttctttt agtcaaactt ataagttttc 1440
tgtggctcaa aatattctca accagggttt ctttagtggc catcagctcc caggggggtga 1500
tatcatggaa gctgttatgc ttaggaattt gtttaaaaag acgtcctgcc ctgtgccccca 1560
gtacatttca acaccacca gccacacagc cgccttctgg cccaacactc ttaaagacac 1620
agtgcctagg aatgtctctc atgccccctt cctgaggcag gtttgccact gtttccccag 1680
gcctggcagt cacagatggc agtcactgac ctgctgtgat ttgagagatg gagagaaaac 1740
cttccactct tcttattctc cctaatagcc tcagtctctg ccttcagttc cacatttccc 1800
tttggcgtaa gctatgattg tcgtccaagg cccctcctag ataggcaagg actcatgata 1860
ccaagagtgt gatcagggga tagagatgag atgtctgggt tggatgcggg agtgggggtat 1920
tttctaacta atgggggtgca aggggtacct gagcatgtc tcaaaatgtg ttatacccta 1980
aaaaatgttt ttaaggtagt gtgttgatat aacagttgtt aagaccatga tgctagaggc 2040
aagatcgtga gatccataga gaaggtagtt gaagggtagg gccttttatt cacatatatg 2100
ctgccttctc caccaactga tgtgatatcc ttttatattc gtgactccag tgaaccacg 2160

cctctgagga ttacaccct tgtatttgta ctctcttga gtctgggctg gcctgtgact 2220
 ttaatcagt caatgcagaa gtgggttcagt gccagttcta agactacaaa gagaaagaaa 2280
 agttcaacct tccaatatcc cagcagacat caggccccag ctgtgtcacc agcttcacgc 2340
 ccacgagtga ccacaacaaa cccagcagaa ccaaccagcg catcccagcc ctggttgcag 2400
 aatcatgagt aaataaaatg gttgctgttc t 2431

<210> 278

<211> 2696

<212> DNA

<213> Homo sapiens

<400> 278

catggcggcg tcggcggctc tgtctgcggc ggccggcggcg gcagccctgt ctggcttggc 60
 ggttcggctg tcgcgtcgg cgccggcccg aggcctacac ggcccttct gcaaggggct 120
 caccgcacg ctgctcacct tcttcgacct ggcttggcgg ctgcgcatga acttcccta 180
 cttctacatc gtggcctcgg tgatgtcaa cgtccgctg caagtgcgga tcgagtgagc 240
 gccggcggcg gcggcgaccg cggaggcccg gctggagggg cgacagtgtc cccgccgcc 300
 cccggccggg tcgcgggcat gaaggacagc tggatcgcg cggggggcgg aggtggggcg 360
 gcccgggccc ctggactcta gacctacgc gcccgggcac gaaggcccag ccctggccct 420
 ggccgcggtc tcagcccggg acccggatc gcgcagaaat gcactgaaca ggcccctaca 480
 attgggctcc agaaactacc tgagctcgga ctacctgtt cctcacattg gcaaaagagg 540
 gggaaccag aaggagggga ttctgctgcg gcgacttgac tttcccgcc ccgagcagaa 600
 aggcattgac gttttaggc ggtgaccgc cccttctctg gccttgccaa gagtctcatc 660
 cctaccctgg ggcacctctg accctggacc tgcttgggca gaggcagcgt gaagggcctg 720
 aacaagagga gaagaaggc cttcctagta gaggcacagc atggacaaag gctcacaggg 780
 gtgggggtgc ccagtgatcg agtcctggct ggggaggga ggtctgagtt ccctgggaac 840
 tgaaatcggc tagcagcact gtgagagagg tgtatttccc cctcctaag acagaggaaa 900
 ccgaggcttc ggggaggggg ggatttgccc ttgacatgca gataggatga ggaggaactg 960

cgtgtgcccc tgggcctgca ggctcccaca cccctcccca gtcttctcca agacctggca 1020
 tgatgggagg agggagggga aagtgaagag ggaagcatag ggctcctagg gcaccaaggg 1080
 agaggggccc aagggtaggg aatctgggga tctcgctttc tttggagcag tacagaagat 1140
 cacaggaaag attaggacag acagctgaga tggcagacag gagagatggg cccaggatc 1200
 cctggggagc caagctttcc cccacagcct agcctcccca cccacctgg agcttcacca 1260
 agggcttttc agcagtgaag tggcacaac ctcccagttt ggtgggcaag tggggctgat 1320
 ggtggtgtca tggctcctgg agacacgaca taaccaggag ggtgaaggga taaacctggg 1380
 gtgggctggg gctgagaccc atggcatgac cccaattctc tctcctcaag ctgaccccc 1440
 ccgccatccc caggatcaca caggagaatc tcctcctcac ggcttggatt ggtcctgggg 1500
 gccccgggtt gtgctgctaa ctggtgtaca atgctcaaga gcagcccaga ggggagccag 1560
 gaagggaccc tcgccctcac ctgctatccc catttccgca tctcttgac tggtaccctg 1620
 agggccacat tctcagttcc tgggattgaa aactgcagca gtctggccag ctccagggac 1680
 agagtgatcc aaccacctac cacgtacct cctcagcagg ccaactggacc caggacctga 1740
 atgaagctgt ccgcctgcct caccacagaa gaggctggac agtggctgcc tcgtgcccc 1800
 tgcagtctcc cacagccagg gcccgatggg gtgcctcctt gtcccaagtc tcctgagaac 1860
 ccctgacctt gctggcctct ctcatccgcc ccaaccctgt ccactcttga ccacctctgg 1920
 gggcctgtca gcctgctggg ccccccaaca gatctctggg ggcagcctct gtgggacaag 1980
 agtgatacag agctggagga gaagaggagt gaggggcctc cttgtgtctg atgcacagat 2040
 gtggcccttt caaacctgg tgtcacctc tgggtgactg gatccctagc tccagcctct 2100
 tcctgggcca gccaggaagg gtggaggaaa gttctttgct gattgcatgt gtgatacagt 2160
 ggggggtgcc tgagccctcc ccatgcaagg ggctcatcct gggactctgg aagctgcttc 2220
 cctactggga gaaatgtgtg tcggagctgc aggggtccct accctcagag accccgact 2280
 gcagggaacc caccacataa gagggtcacg gatgtccatg tccgcccacc cccgtggct 2340
 tctgctgtgg ctatatcggc ctagaggggc tggctgggga ggagcagggc taagccctca 2400
 gcatttgctc ctgtccctgc cttttcacc ctgtgcctg aagtggtagc cccgcctgct 2460
 gcttctctac ctccctccc cactctttct ctccctaca gggcccttgc tgcgtgatgg 2520
 ggtctccatg cactttatct atttgcagtc tgttttctag gcggtggagc ttctagacac 2580
 cgaccggaat gacatacgtt tctgtgtgtg attcactgtg tactggtcag cacaggctgg 2640
 ccagagagat gttcttgttt ctggtgttgt cacgtcttct tgttttctct aagttt 2696

<210> 279

<211> 2511

<212> DNA

<213> Homo sapiens

<400> 279

```
ttttattctg cactcatccc tattattgaa atcagtggtc ctcagccctg aatgtccttt    60
attttaatgt ttttatttta ttgtaaattg acaatttata attgaatatg gatgtactgt    120
agaatcacct gagaagcttt tgaaaattct gatgcctgag ccccttttct gaatattctc    180
atttatttgg ttttatgttg ttgagaatct ctggactaga tctcattttt ggaatctctt    240
aaccactttc ttctctcttt tcttcactat atgaccaaag tctcatcttc tttacaaagc    300
catccttttc agctaggagg accaagggtta cactgcaatt ccaactccca aatctcagtg    360
gatgtaaaag aacaaatagc aatgcatgtg catcccacag gagtggaggg gttctactcc    420
ctgacacctt cactccatat gtcactgtta catttgctta aggtatttgg gtcagaactg    480
gccacctggc cacaccaaac ttcaaggaga gagaatatgc cagcctatca tgttcccaga    540
aggacaaacc aaaacatctg tgagctacca catttgatga caccttgcca cactttgctc    600
tcctcttctg aattcctgct gcactcatct ataccatata aagatcgata acttcattgt    660
gtgcgatttt gaactttaga tctattttga attttccaag gacaagacct tggaaatcat    720
gtgggtctaac ttcctagctg actttgggtc ttaaaacaaa gaaggattcc aatttcttat    780
ttttaaacia aatcattaaa acaacaaatg ttgtcaactc attttttttt tctcagttaa    840
agacaaaaca aactcaaagt tagaatggag agctactggg aagaaatgca tttctgcatc    900
tagctgcttc agagtgcatt ccttatttag atggggcctc atgtgtcaca gtacatttct    960
gaaatggtta cctgtttcca tttgggtctg tgcctactcg tacttttagtg acattaatgg   1020
ctactaagga agtaagactt ttggagaaaa tgatattcta gtcattccaa agttgtattg   1080
aatacatttt tttttgccat gaaatagcct taggagatct gctggctaataaaccagact   1140
tgataatcgc ttcattgtga tggcagaaat tatgcttatt cccagtgaa ataagatttc   1200
tcaagtcctg gtagaggcag atgaatttat cattctgaaa cagcagggtg ggtcatagcc   1260
```

tgggtggcaa gctttgtaaa tattaatgga gattccaaat tccactgtgt ctgcagtaat 1320
ttagaagcag tgtagcagc gaagggtcaa gggcaaaaca acaacaaca aaaatgatgt 1380
gggtgggact tggatctctt tactgtaaga aaaattcttc ttttttgga aattcttttt 1440
gtctcttcag tgtctgtggc catctgaaaa cgtccacatg atgccagacc atgctttact 1500
ctgaaaatcc accgataagg tacgttgaag atggagaaca actgatgtca agacacattt 1560
tggttgtaag ggacagaagt ccaactccaa cgagcttgcc aaggatggaa cctgctggca 1620
aacataacca aactttggga agggcagggt atggttaacc tcaggtttct ggaagcagag 1680
tgtacagtgc tgtgccgtcc ctcttctctc tgcttctctc tgcataattg ccctatctc 1740
tcagtggggc accctccctg agcagcgaac agcagccaca ggaagctcca gtgtcaatgc 1800
ctcccacagc tttccagaga agcagcagcc tctttgtag ctccgtatca aagacatcca 1860
caggcagggc tttgtgtgac ccagtttggg tcacgtcttt atttggggcc cggaggaaat 1920
ggatacaatg actacagccc atcatagaac ctcatgttta gaggacaaa tttctctct 1980
ccaaaagtga aatgttgtca ctgtccattc aactgatgaa aatcttcctt ttcaacagaa 2040
aaactatcat gatgttgtct gttgggcttc agtttcttac agcagtcac ttaagaatta 2100
aactggtatg gataatctga ctatgaactc cttgagggca gggaccatat tatataatac 2160
ttctgtgtcc tctgctatct cttagcagaa ttttgaaaat gtgccaagtg ttgacttggt 2220
tcgatcactt gtgagaatgg agggacccat aatgttaata atcaatgaag gttgttggag 2280
ttacttacc aaaaccttat gaacttagcc ttccctagca gattgagttt cctaatttgt 2340
ccggtataag caaacactaa agagggttg gggaaagttg tgagttgagt agttgggaaa 2400
aaggtagttt gcagttttat ttacgtctca cagcttgaca tttttgttt gccttggagg 2460
gggtactttt aaaaattcct cttttgaaaa caataaaatc ttagattttg g 2511

<210> 280

<211> 2146

<212> DNA

<213> Homo sapiens

<400> 280

ttttttatag aagaataaaa aaccaaaagt gaaatttcct ctcacgtcgc ttttccttaa 60
ttcctaagcc cagaggaagc tatcatgaat ggtttagtgt ttattcagta aggccttccg 120
atgcatttat aaatatgcag cacactctca ctgtctcctg tgtgcacaca aaagggtgctc 180
atatacatgt cattctatgc cttgcttggt cccctaacca cgtgaataac cacgtgtcag 240
gtcatccttc cctacctcct cttttttatt tttccgagac agagtctggc tctgttgcca 300
ggctggagtg cagtggtgca accttggtc actgcaactt ccacctcctg ggttcaagcg 360
attctcctgc ctcagcctcc tgaatagctg gaactacagg cgcgaccac catgcccagc 420
taatttttgt atttttagta gagacggggt ttcaccatgt tggccaggat ggtcttgatc 480
tcttgacctt gtgatccgcc tgcctcagcc tcccaaagt ctaggattac aggcattgagc 540
caccatgcct ggccctacc tctccttct atagggtgcc agtacccttg gtatcgaagc 600
agcataacta ttaataccta aagctttcct ccaataataa tttagtctgt gtcctgttt 660
ttctctaaaa tgaatgttg catgaacatc actgtgcaca tatacttttg ggaacttata 720
tctacatgtg tctgtaggac agagtcttag aggtgggatt tctgggcaa ttatatacat 780
gttttaattt ttgacaggtg ctgccaaatt accttctaaa aatgccttac aactagagt 840
tttttcccc atcttctccc catactctca ccaacactga gatagtcagt cactttaaat 900
gtttgccaat ggagatgcaa tcattgattg ttgcgacgtc cccacacatt tttaaagctc 960
gcatggcaca cttagtctgt ggtgtagctt tctggcccc tagtggcaag gagcgagggt 1020
cacagtgggc aggcattcag tcgtgatggg cagctgcttt ggggaccaca gaagatgggtg 1080
tgtgggaagg gaggcctgag aagcatggag gtcatgacac aggagtgagg ccaggaggga 1140
ccttacctg gacagttgtc tgttcagagt cccggctggg ggttggccac accatgggca 1200
cttgaccag gagtgaagc tgcagggttg ggagaggact gttttgcagc ctgagctgca 1260
gtgaggagg ggcctgtctt gcagagagct acacagatca gcaacatgcc ctttatggac 1320
gagtcctctg ggtctgacga tgactgcagc tctcaggcga gtttccgaat ctcggtcccc 1380
tcctctgagt ccaggaagac cagcggacta ggcagcccc gggccatcaa gagaggcgctc 1440
tccatgtcct cactgagctc cgagggtgac tacgccatcc ccccgagcgc ctgctcactg 1500
gacagtgact actcagagcc tgagcacaaa ctgcagcgca cctcatccta ctccaccgac 1560
gggctgggcc tgggcgggga gtcactggag aagtcgggct acctgctgaa aatggggagc 1620
caggtgaaga cgtggaagag gcgctggttt gtcctgagac agggacagat tatgtactac 1680
aagtccccga gtgatgtcat ccggaaacct caaggccaag tggatctgaa ctcccgtgc 1740

caaattgttc gaggggaggg ttcacagacg tttcagctca tctctgagaa gaaaacctac 1800
tacctgacgg ccgattcacc cagcctgctg gaggagtgga tccgagtact ccagagcctg 1860
ctgaaggtgc aggccaccgg gcctccagct ctgcttcggg gtggcaccaa gcccaccgtg 1920
aagggtggc tgaccaaggt aaagcatggc cactccaagg tggctctggg cgctcttggt 1980
gggaaaatct tctactacta tcggagccat gaggacaagg tacttctcag cctcctcaca 2040
atacccactc tcctgcttcc cccgaagcac atgactgcc a ctctatgtcc tgatgaaagt 2100
ccctacccca cgtaacccca caataaatac aaaatcagtt ggctgg 2146

<210> 281

<211> 2106

<212> DNA

<213> Homo sapiens

<400> 281

tgacctcatg atccgcccac cttggcctcc caaagtgtg ggattacagg catgagccac 60
cactcctggc ctcaacttct atctaattct attcagaggg aaaatttcta gaagcgacat 120
tcctgttgca gagaagagat attcacttga gaaccttgat atatatttgc caaatttctg 180
tccaagtatc atttttaaaa agttaagaat atgactttca tagaaacaca tacagagcat 240
atgtcaaaga tgtatttctc taatgcaatg agacagccag caagacagtg aggctgcagc 300
agcatgggga cagagtgcag aaagaggtcg cagaagcctt ggaagaaggt cattcagtca 360
tacaaggaca ccctgatgct tgcgctgcgg tcctttccaa gtccacgggg cattgttcct 420
ttgtgtcaac accagataag attcatgggc attgctgtca gtgttgtgtg tgttataata 480
ccagggaccc tcacatggct gtgttagatt ctaaccaata gacaataata agtcaaagca 540
aagaccgtta ctgattcctt ccattgtttc tttagagact ttggtttagc gctctgaact 600
ttctgattat cagatcttat gtgtttgcta atatataaaa taacaaatta gacataatgc 660
cctataatth tctcagtttg attaatggcc tgaaatttga tgtgtcagtc agtgtttgat 720
tagaatagag aaatcacatg taatttgaac aaggaaagat taatacgaag aattgctagc 780
tataacaggg ttttggagca ataaggattg gctagtaaaa agtaaagaga actctaagga 840

atataagaat aacagataaa aggagcatca acccctgggg ttgagataca acgtccagga 900
 cctctgggat taagatccag actctgtttg agggggcatg gctgtcgctc actgaatgaa 960
 gagaagttgc tgtggtagaa atctgtctca tcagaatcac tctgctataa tactgccttg 1020
 tggagggtact ggtggaagat actcggtgct gctgactgct gtgcacttca ggggcctgac 1080
 aatggagcaa actgcatggg ttctggatct ggacactgga gaagctgtgt tgcagtacag 1140
 aagcctgcc aagaggagcac acaagactct tggaaagaag aggaaaatct cctcttacia 1200
 tgtcaatcta acatcatgcc agctagcaaa ggaaaaatgt ttaaagggtc caagttcatt 1260
 tctgcagagc agacatgaaa ggttgaattc ggagctgaga gacaataagt ggacaactgg 1320
 cacatttggg caaacttgta attttatatc ttagatggac aaattaaaca caagtcata 1380
 ggtgttttcc ttacaagctt acatttaaata ttgggacatc ggtcagaatt ttgctgagga 1440
 cttcaatttt tcccagtgtt tcgggaagga taccgtgggg ccagagccac ttttctttat 1500
 tgtaagggtc tgggctgtgg ccccttttgc ttttctgggc tcctttctca tgggcatctg 1560
 ttttgggagc ttcatttcct catctgcttt gacactttaa tcttggacat tgtagtgaaa 1620
 tgcttcacat tgtcacacat tctaattctca gagaccactc caaatctttt tgaattttct 1680
 tggccattgg aattagtact ctggaatcag tacattaaga atggtttttt aaaaactatc 1740
 agctagaatt tcaatatttt agaagaaatg gtcagtataa atttggagaa gcggttttcta 1800
 gctagtagta gctgtgcaga aaaacagttt tattgataag tatctgattt ggatttagga 1860
 accagctagg atgaaaaatt caattgaggt ctggccagat agacataaat tttatttttc 1920
 ctttatattc tgtgtccaaa agacaaattg tcatgagtta tttattttct tttctgaagt 1980
 atccatttgt ttctcagctt tgtaattaga ggtgtagaaa ataaacggga ctcaacagcc 2040
 taagattttg tttaaaaaga tgttcttatt tatttatatt aaaaaattt ataaaatttt 2100
 ttttgc 2106

<210> 282

<211> 2157

<212> DNA

<213> Homo sapiens

<400> 282

tttgggtgtta acatacaccc aagcccaccc ggcccgtcgt gacctctgat ctgtgcccac 60
tcctccggtt ccagaacgca cctctctcct ctgtcttcac agtgggggtgt ggggcccgtg 120
ggatgggcct caggccacca ggcaataacc acagggcctg cagcagtgcc cctgccagcc 180
ccgaatccca cccccgggac cagccacatc cacagcacia ctgccccgct ggagaggcac 240
catgggctgt gaggggcttc ccggacaccg cccacccggg acccgctct tccaccaaga 300
cagagacgtt agcaacgcat ggcggttggg gacctggggg gctcaggagg gggtaccggg 360
ggccccggcc agagatacat caattacacc cccgtggggg gacagccgat gggagccagc 420
accagcagga tccgagggcg ccccgacag aggtctgccc caccacttc ctccccacca 480
cctgtgcccc agagagcagg gcctgcccgg gaagggtggcgc tcctggagtc gagtgtacct 540
gcagccatga ggttctgggt gttttttgag agagtctgag tgacaccaca ctctgtgtgac 600
cccacagggt tgtgtccaac atacacggaa gtggctatgg aatggtgtat ttgtgcaacc 660
tggggtgcgc ggatgggtga ctgtatcta agtgcactg cgtgtatacc tgtgtgtgtc 720
tgtctgggat gatattttt tgtggcagtc tgtgtgtgta atagtgggtg agggatataca 780
gagagggtgg tagttgtaga tacctgtgtg tggttgtcag caagactgga tatgtgtgag 840
gtgtctgtgt gaatctttgt gcctgtatga gcatgactat attttgggga gtgggtgata 900
tggtttatct gagagcattt atctgtaaat atgtttgtcc tgattgaggg acacgatctg 960
tgttccactc tatagcaaca tgactgtagc aacgtgactt tcggttccaa atctgtatca 1020
gtcagctact gctgtgtaac aaatgaccac aaatgtagca accagaaaca acacatgctt 1080
attatctcat agattctgtg ggtcaagagc ctgggtgcag gttggctggg tcctctactt 1140
gggatctcag gaggtgcaa tcaaagcatt ggccaggcag aggtctcatc tgaaggcctg 1200
atcggggaag gatttgcttc ttagaagctc atgtggttgt tgcagcattc agttccttgc 1260
tgttgcaaga ctgaaggcct cagttcctcg ctggctgttg gctggaagct gccctttgtt 1320
ctgtaccatg tgggtctctc cacagcgggg ctcggagcat ggcagctaag ttagtgaggg 1380
aaggtgagat ggaggttttg gtcttattgg gtgtgaggaa gcaacgtgtg tgtgtgcgcg 1440
cgcccttttg tgcagtgaga gagagagaga gattgcacac atgtgtctct gtagtcatgt 1500
ggccagggtg gactatgtag gtaacagatt gctcgtgtct gatttggtac aagcatgttt 1560
gttttcctct gtgttcgtgt gagtgtttac tcaacaaatg tttattggac aactcagag 1620
agagggagtg tgcacacgtg cgtgtgtgtt gctatccagc acgtggaccg ggctcccaga 1680

agagctggca ttgtgtctga gcagagctgg gtccccccaa aacttgggct ggcccagggc 1740
ccaccagcag ctgatgttgc ctctctctct gtccctggcag tagcttcttg gttctgaagg 1800
tgccggagag agtgaggctg ggcaggggtc tgcggccctt tctcaggga acaccctgat 1860
agcacaatct ccttggggcc ctgcccacct ccaggcctct cccacctcag gccctgcccg 1920
accctgggga gagaggcat ctgcaatagg agggggcccg agcctgtcct ggctgctggc 1980
ccatcctgcc tgggcatccc tgggtgccggg gactgtgcca ggccatgctt gctgtgactc 2040
cgccccctgcc ccctctcccc tcgcatgttg gtgccccac tccccatcg tggggtctgt 2100
gtagccttcg ctctagacat agtcttcttg caataaaaaa gtggatcctg cattccc 2157

<210> 283

<211> 2328

<212> DNA

<213> Homo sapiens

<400> 283

ccgaaagggtt ggtggttcgg gcccaccag ggacgcaaaa tttaacaaa taaaagacta 60
gcaggatatca ggagcaaccg ttatggctaa gactgagata gagctccaat atagagcttt 120
ccccctacta gggctgaaat ccagatgtct ttggaaaggg cacacctttg attcactgga 180
tagtggagaa gtcactaagg tgcctcgtaa gtgggagcat aagtgggagt tgctagaagt 240
ttctggggtg ccaggggggc catccacaga aagtggagtc ttaaatcatc agagtgaact 300
ccctgagtgt cagagggagc tgggtggtggc tgggcactgc tggaaccgaa atctggagaa 360
gcagccctct aggagcccag catgcctgca ggacggccct gggattctag gactgaaaag 420
atgtggggag cagtgacttg gtttggtgtg caggcccata ccatctggga aatcccggat 480
aatctccagc tgaacacttg agaaaattgc agcctgcagc atgggagaaa ccacacaggg 540
aataagcatg caggggaggg tggagtgtgc cctacaacag cctagagagt gaatcatacc 600
agaaccagga aaggaaaatc ctttctctct ccagcgtcct ccagaaccct ctactgacaa 660
ggtttaacac tcggctagct agcaaaggag aaatatattcc aaaatccatc ttcatttatt 720
acaaagtagg ccaaaatatg gtgaatttgg agctaagagg aaatacatca ataaacagca 780

tagtctgccc ctttgagtac tcactgtcca tatatacctt ctacgcacac ttgaatgcca 840
tacaataata actctacatt tcacctaaca ggatactcat catctccaaa atgaggagat 900
gcaacaatca ttgcgtacag tgctgtggct atattaattg ccctttagaa tcatcacagt 960
tccactggat agtctgttgc ccaaagacta atttgtgaatt taacctctag caacttgcatt 1020
ataaaatttt tgtaataaga agggagcaag aagaggaaaa tgtgagcata tatacataag 1080
tacatacaca tgaaaagcaa aaaaggaaat attcaaaatg actacagccc ttttttctgc 1140
agttgggtcac aaggccctaa tttttactta tggttctctt cttctactgt tcattgattt 1200
cgcccacctc cagccagaac ctggtagagt aattcaaaact ctcattcttg aaagttccaa 1260
gtcttcaatt atcctgcctt ttatttttgt ttctgtactt ttctactaca cttttctatt 1320
gcatatggag tactaatata caccccaaac tgtctcctgg gttacagaca tagtcttctt 1380
tgcccctaatt gtataaaggc aaccagttt cctcttggca atagggatca gtcactccac 1440
ctagtagagc aatccacctt tctgcctgtt gattcagtag catgaggagt ccagaatagc 1500
caaatgcaaa tctttctcca attcagtga accatttgtt ctcattggtg aaacctgtt 1560
ccctttaaga actcagatct ctgaaatggc agagctcaaa gatgccagaa gcagcagcaa 1620
atattctgca agtgtgttat taggtgttgc tacgggtctga atgttggtga cctcccaaaa 1680
tttatatgtt gaaatctaata cacaacgta atagtattaa gaaatggggc ctttaggaag 1740
tgattaagtc atgagagtgc aacctcata aatgagatta gtgccttggg aaaagagggtg 1800
caagggaact gttcacccct tctccagggt gaagagccac aagaagatgc catattggaa 1860
gcagaaagca agccctcgcc aggcactgaa tctgcttgat ctgggacttc ccagcatcta 1920
gaactagaaa cagaaccaat gggatgtaca taaagagatt tattgtaaga aatcggcaca 1980
tgtgattatg gaggtgaca aatccaaga tctgcagggg gaggtggcaa gctggagact 2040
caggggagca tgtcttgaac cagagccaat gtgggtttcc acagaccact gggcaagaca 2100
cgttgacttt acctccactc atatctgctg tacagaaaac ccaacatgat taatctagcc 2160
tacaatttga cagagacaga attgaatata agcagttatt cctcaggtgc cccagtgat 2220
tacctgctct tccaacagaa cagaaaagggt cttaacgacc acgggataaa gacaccattc 2280
tgtgtttcaa ggctggagtt atccaggaat aaagctatat cttcaagc 2328

<211> 3239

<212> DNA

<213> Homo sapiens

<400> 284

gattgagggt ccattgggaa caccacaatg gggacgttgg cactttctca gtgccgtagt 60
gtcctgtag gacatgaatt atgccagttt gtctcattat ttgtgacatt aactttgatc 120
atgtgtttaa gattatattt gctatgttct actgtgaagt tactgttgac tgtaattagc 180
aggtaatttg cagggttaata ctttgagggt aggtaaatat cctgtttctc ttcaaacttt 240
catgtactag ttttatcttc cttgatgaa ttttatctat tctattattt ctattatggc 300
tgaaaaatag tgattttttg actatctata gatattagtt ggcattctac tgtaaggaaa 360
actttctttt ctctgtact tattcatcgt cccccaggaa tcagtcattt ttccaaggag 420
acctagtcc tttttgtgag gagttgtttt gagttcattt tgaagttcat ttgaagtttt 480
gagttcattt tactataatc tgcctagggtg tgattttctt tttatttatt ctgcttagga 540
tttgagaga tttttttgaa cctgtggctt gatgtccatc acttttgga atttctcagc 600
cagcatagta tctgcagact gtgtgtctgt tccattttct ctcttttctc cttgtaggac 660
ctcattcaca aggatgtag aactttttac catggcctca tattatttcc acaattttat 720
gtgtttttca tccttttttc tctctggttt tctatctagt cactttctgg tgacctgtct 780
tacagtttgt cttctcttct gctttgtcta aatccctcta ttggattctt catttcattc 840
atcgtatgtt tcagttctag gatttctatt tgatttccga tttaggttct ctggtaaaat 900
tgtctgcctt ttcattccgtt ttcttaaacg tatgaattag agttattaat ctcccctgac 960
agatgacctc aataacctgtg ggttgatttc tactgtctgc tttttctatt ggtttttgtc 1020
atttggtcct gactgaatgc caagcttggtg tattaagaaa aagctgtagt tgttctgggt 1080
gatgttcttt tcctcaggag ggtttatttt ttttctgact ggcagctgga ggggtgggcag 1140
atcatcttaa actggccaag ggtggtgttt ttctgggttg ctcttactcc caggcaatgg 1200
ttccaccagg tccttctgag aactctggac ttccgaaggg cccccatct tcatgagcct 1260
ctacttgccc tcacccaac atagacatgc acacacctgc ttacacacac acacacacac 1320
acagacacga tcttaccatc tttttcagat tggctgggtt cttcaacgt acgtagaaga 1380
ggagggcatc cagtgcggc aggaacgtgg acaagactcg cagattttct tgggagagtc 1440

actccagccc tgaagtctgt ctctagctcc tctgtgactc agaggggaaa taccaacctc 1500
ccagtcttcc actgcccaca gggataggga ggggtgttgag aatcctaaac tcgaaccgtt 1560
tcaactgtcag cctgccctcg gcgacccatc actgggtatg ctattgtaca tagaggaaac 1620
ctgggctagc cccacccaga gcgtagagga gggggcaccg acagtgtctc gagccaggct 1680
ctgggtagtg gctgaggcca gaggcccatc gcctgcccct gtccaactga gatggccttc 1740
aggagcctag gtttgaacag cagatgtctgt cccaggaagg gctagggaca tcggagggga 1800
cctgccccca caccctctgc tcagcccctg gactcagcct tgcctgtctt ttctgtctgc 1860
tcccaggggg aggtgtcaga cctcgggagg cagacgggac cagagccagg ctgttcaactg 1920
tgggcccact tgcccactg tgctagggcg cgggaggaga gagcactgtg gtcgccctct 1980
gcagccactc tggttcccaa gacttccctg actccccac tcccctcctt gccaggggca 2040
caccggacc ccacacggca ggcccctctc ttgggagggg cctttggaat gatgaaattc 2100
caaccctgct gcccggtcag cggtagcgtt tcctgccctc tctctgagag gccctttctg 2160
gagtcctggg aaggtgtctg cctggcccg cgtccagatc agtacatctt ttgtaaaaac 2220
cctgaaatgg gcaggaaga aaacagggat ttcccctctc tagatccctg ccaggtccct 2280
ctccaggagg cccctctgct ctctgaagg gtggtccctg aggtctgcc cagccttggc 2340
acgagagggt ggttccagcc cctggcaggg cttccttcca agggcccctg cagcctacaa 2400
actgggcctc gggcgactca aaataagtgc tcttgggggt ggctctacc cattacctc 2460
cccagccaca actcctggcc ttcgacttct ggctgggtg gccagaccct ggtttctcta 2520
ccctgatgtt gcatgagacc tggtaacagt gtctccctcc cagctccttg ccaaagcctc 2580
tgttgagacc tgggcttctt gtagccccct ctccctctgg ccagctgcac agcctgtggg 2640
aggtgcccgg cccaggctgg gtgtggggga agctggtccc tgctgtgggt ggcgttgggg 2700
acctaggggc tccttctgag gttggccttg tggcctctgg gctgtatgcc tctggggtgt 2760
agggaagagg cgggaggagt catggggatg gggagcggca gggggagaga ggggccctcg 2820
acaaaggctt gggaaatgag gggaggtgga ggcagggcag gggaagcgaa gagtcagcct 2880
tggagagagc accctggggc ctccgtgtcg gggtagaccc agcactttgc gacctgcggc 2940
ccagcaggcg cggaggatgg cggggaggaa gccagcagcc cctgtgttta ctgtcgtcag 3000
aaaggctctg tgtttttggt ttgggggttt tgttttgttt gtgttttggt tggcttgttt 3060
gttttttaag gggaaaaaag tttgtaatta tttcatccaa atctcccgtt atatatctgt 3120
gaataataag agattttata atagcaagaa aatgatgtat attttagttt gttgacaaat 3180

aagtcacatcat gatcacgaag gacactgaga aaaaataatt tagaaccttg gtttttgtg 3239

<210> 285

<211> 2689

<212> DNA

<213> Homo sapiens

<400> 285

gtttttatatt cttccctcta gcacaatcat tttctgttcc tgatggaaca atgagaaggg 60
tgggggatga aaatttctgg ccaccgtgct ctggcctcct gttcaagcat ctaaaaataa 120
gcagatcatt cacgctgggc caaatgacct ccgctggcat actcctgtgc ccttgttgtg 180
ctaaaagaga atctatctct tcctttgact ttcattacaa aaagcctctt tctctaacct 240
ttgttttatg taggtgccat tattattact gggagcagtg ttgtgtgata aatacaggtg 300
ctttggaaac agcaactttg gattggattc cgactctgcc tcttacttgt gtggcttagg 360
gaatttttta ttttttgag acgggggtcac actctgtcgc ccaggctgga gtgcagtggc 420
atgatcatag ctttaagtgt ccttctgcct cggcctcctg agtagctggg acccgaggc 480
acgtgccacc agggccagct aatttttttt aagtgttttg tagagatgag atcttgcctg 540
attgccagg ctggtcttga gctcctgggt gtaaagatc ctctgcctc agcctccga 600
agtgcaggga ttacagagat gagtcacat gcctggcctt agttaagagt ttttaattca 660
aatcagtatt gaatccccag tatttctgt aaaccagaag ttagatctag agtctttatt 720
catattaaaa tttttggcaa gaatacatca tagttttctt gaacctaagt tcctacacag 780
atttaactct agcaacaggc tgctttgctt ctccatctc cctctgctca cctccacgga 840
ctgagtcac cttcaggcct tcctttggac gtcactttct cagggaagct gccctgaccg 900
cccatgttta gcatgtaggt tcattcctgc catggcatca ccacagggga ttgtaattgc 960
ctgcctgcca tttggagaac ttctttagc tcacctcct tgcctgcct tccactaatc 1020
cttcctctc accacacaca tccccctgct tttctatgag aggtatgctg cccatcctc 1080
agtcctcacc tcacatggca caccctagg tcaggtttcc catgatactg agccatactc 1140
tcctgtgctt tttttttttt tccccatggc atttatcaca agttatttct ggattttctt 1200

tgttacgaat atttgccttg tacttttagac tgtaaacttg ttggtctttg cttaatgctg 1260
tatccccagc acctagcatg gtgcctggct cctcatggca gttactacat atttattgga 1320
tgataaaggg tgctattgca ttcttttata tccttttagga cagaaactac cttattgatg 1380
tttgtggcct tgggtgtctag ctggtacacc aggcccacca caagatatgg ttgcccaggt 1440
acacaagtcc ttcattgtat gagagagaaa tgtagaaatg tagaaaaata ggccagtagg 1500
gaggccagta agaaggaaaa ataagtctct atcagctgtg aactattctt gccaaaagca 1560
tttaaccaga atctaataca gccttttagac ctaatttcta gtttacagga aatgcaggga 1620
tagaagaaca tatttggtaa caccatgaag aagtgatcaa ccacatccag aatgtcagac 1680
attctgcagt acgatgtgtt tgaacaaagg tcataacaag aaaaaagaag ctagccaggt 1740
atggtggctc acacctgtaa tcccagcact tcgggaggcc aaggcaggag gatcacttga 1800
ggctaggagt ttgagaccag cctgggtaag atagcaagac cttgtcgcta caaaaaaatt 1860
aaaagtaaat aaataacttt aaaaattaaa agattcaaag atggccgggt gcggtggctt 1920
acgcctgtaa tcccggcact ttgagaggca gatcacctgc ggtcaagagt tcgagaccag 1980
cctggccaac atagcgaac accatctcta ctaaaaatac aagctgggca ttgtggcagc 2040
cgctgtagt cccagctact caggaggctg aggcaggaga atcgcttgaa cctggaagga 2100
ggaggttgca gtgagccgag atggagccac tgcactccag cctgggtaac agaggaagat 2160
tccatctcca aaataaataa ataaataaaa gatgcaaaga ttattctaga ttaagagatt 2220
gtagagacac accatccaaa tacataatat tatccttgac tggatatagt tagaaaaaga 2280
caattacaaa agacattttg aatacactgg agaagttgaa atatggaccg taaattagat 2340
gatataataa ttagagttat tgttactttt cttggatatg tagaaaattg acctatttct 2400
tagaagatgt ataatgaggg gctggatgcg gtggctcgtg cctgtaatcc cagcactttg 2460
ggaggctgag gcgggtagat cccctgagat cgggagtttg agaccagcct gaccaacatg 2520
gagaaaaccc gtctctacta aaaatacaaa attggcgggg tgtggtggcg cgtgcgtgta 2580
atcccagctg aggcaggaga atcacttgaa ctcaggaggc ggatgttgtg gtgagctgag 2640
attgcgcat tgcactccag cctgggcaac aagagcaaaa ctccgtctc 2689

<210> 286

<211> 3203

<212> DNA

<213> Homo sapiens

<400> 286

ttcagtaaca	gtccatcaat	attctgcttc	attacatagt	gtaaagatgt	gggtggctct	60
tttaaagtag	accagctcaa	ccattttttc	ttaaagaaa	tctgatagaa	agtgagattt	120
tcctcctcca	gattttaatt	agtcagtctt	tacaatgctg	ccatttcttc	agctgtagta	180
actggaaatc	ctatttaatc	agaccttgca	tccttgaaac	ccccacaga	gctacctcat	240
taatgaaact	ggaaccttgc	tgctctcata	ccagaatcca	gagttaacta	aacacacgca	300
cacaggttac	agaagaaaat	gggcccaccc	ttagcagtag	aatttcgatt	gaagctgcca	360
aagttacatg	agttctctct	tctcatgaag	ggtagtgatt	tgatctccag	gagcaaaata	420
tggcaccag	aaagtagccc	caaagagaa	ggctaccccc	atgatagtct	gccgtgcttg	480
gctttcgatt	acttttctct	actgccgccc	cagtgtaaag	gtatgtaaga	tcttgacaac	540
tgtgtaaagg	atttcagtgt	gtaaactctg	ctgtacaggt	gggtgaggtg	taggtgtgtt	600
cccatgctat	tcagcctgct	tagcattgat	gtggagccca	aagcagtcct	gcagagcctt	660
acccccattc	aagctcaaca	gcctctcctc	taggccttgc	tccttctccc	cctgtgattc	720
tcacactttc	ttctgatctt	gggcttatat	actgaattcc	ctttcagctt	cctagagccc	780
atcctgttca	ttctgagtat	ctgtataggc	atcaagccat	gctatgtggg	gagccctcta	840
gaggtttctc	accatcccat	ctccatcagc	acatcccaga	tctggcatct	cacagctgtg	900
ctctttctgc	ttccttctctg	ttcctcgctc	ccttaccctt	agaacaggtg	aattatagaa	960
ataccagaag	ggacagtaga	aaccccctaa	gcttacgttt	ttatttacag	atgattgggtg	1020
ctctatTTTT	agggacttcc	tcaagttctc	atagccaatt	agttactcta	gagcttcctg	1080
ttggcagagc	ccagggtctgc	agagccctgg	gtggtcacct	accacacagc	ctgcctacac	1140
accagtgaca	cacaaatatt	gtccttctca	atgtacccca	tgacatgtga	atggttggga	1200
agcacaggag	aacagagctt	gggggaggtg	ctgacttccc	atagagctct	gtcctcatcc	1260
tctccaatgt	aggtcaatgc	ttgctcatct	gtttcctcac	tagtctctct	tcaaagttgt	1320
tttgctttgt	tttttattcc	cagtttctct	ttgatcaacc	tggtccagac	cctggcccta	1380
tccccagcat	ggttctctctg	ttctcctctt	tggggagctc	tgtaccaccc	cggttagcaa	1440
gataaaggca	gccactgatt	tctcaagggt	ataccacact	gccttacaac	atataggcat	1500

gttctaggcc tcatatgata ccgtgtctag aaacatccca tctggggcct tctgtacatc 1560
catggtcact tctgtaaggt gtgaatattt gagtcatacg gagctgagag attctgagta 1620
aagtggtagg cccacttttag cttctctcac tgctcagtgg ccctggagca ggatagattg 1680
ggctggccta ctccatgcat cccaaggag tgctctgagg ttgtgcagcg ctcagttacc 1740
tattaatctt attcaacaaa ttcttactaa ctgctaccaa tgaggaaggc ctttggtgag 1800
ctgagcatac attgatgaaa tacagcagcc atagagatct atctggggca ttaaggagat 1860
gctttaactt cttttattta ttcagcaaat attgattaat ttctaactct taaacctttg 1920
tactagtggc taaggatgca atgggtgatag gatgaataca gtctctgctt tcatggatct 1980
tacattctag aagggaatat agatttāaaa caagtgaata cacaagtaaa tcatgacaga 2040
tgctaaaagt tctgtgaaag taacaaaata ctaaattggg aagtaaggag atgagtggga 2100
aaccatttt agatagagtg atcagggag gcttcattga gaaggctctg tttāagctga 2160
gatgtgagga tgacaggag atcatcagat aaagaataaa gagagaatat tctāaacata 2220
ggāaatagca tgtgcaagg tctgaggca ggāagtta gtgtcacagt gāaacatc 2280
cctatgggaa cattccttga ttctctcctt tccacttggt ccacagaggc taccttttag 2340
aaagggaaca ggcatttcag tttttctgta tgtgacāaat atttttctc atttctctct 2400
tccagāaatg gttaagcag cgcctggcaa agtggcggcg ctcagāaggc ctgccctcag 2460
agtgcagatc cgtcacagac taaggagatg gcaggcattg acagcttcac tccatgaagg 2520
ccatctctgt ttctctctc cgcttaacca agctgttggt gtttttcagc atagtgttgt 2580
atgttccatt gctagctgtc ctgctgttta acacagtgtt gtatttttt tctāaatgta 2640
cataattaga aaagāāata acaataggāa gctatgtgta tcttctgtgt aaagcagtgg 2700
cttactgga āāatgggtgt ggctagcatt tccctttgag tcatgatgac agatgggtgtg 2760
āāaccatct aagtttgctt ttgaccatca cctccagta gcaatttgct ttcataatcc 2820
atctagcaat ccaggcctct gttgāāāga taatatgagg gāāagggāa cacatttct 2880
tctgāactta ctccctaag tcactttct tatgtatcat ctaatacaat gatggttgag 2940
tgāāātaca gaagggtgt ttgagtattc agatttcata āāacattcc ttggaatata 3000
gtgcattāa cttggāāga agcctgttg gccagāagac āgāāactcca actggcāāāa 3060
aagcaagcat ctaagāāāā āāaccacāā agttcttgāa tttactatat ttaaatgcat 3120
tggttaagtt tattttgcta āāāāagtga actgcttttt gtctctāāāā tgatattcta 3180
āāāāacct taactttttg ttg 3203

<210> 287

<211> 2171

<212> DNA

<213> Homo sapiens

<400> 287

```
acctctctcc tggagcgctg ggccttcgct ggccgcaccg gcagccatga gctcggagat   60
ggagccgctg ctcctggcct ggagctatTT taggcgcagg aagtccagc tctgcgccga   120
tctatgcacg cagatgctgg agaagtcccc ttatgaccag gaaccagatc ctgaattgcc   180
agtgcacagc gcagcttggg tcttaaaagc aagagcgcta acagaaatgg tatacataga   240
tgaaattgat gtagatcagg aaggaattgc agaaatgatg ctggatgaaa atgctatagc   300
tcaagttcca cgccctggaa cgtctttgaa actccctgga actaatcaga caggagggcc   360
tagccaggcc gttaggccaa tcacacaagc tggaagaccc attacagggtt tcctcaggcc   420
cagcacgcag agtggaaggc caggcactat ggaacaggct atcagaacac ccagaaccgc   480
ctacacagcc cgccctatca ccagctcctc cggaagattt gtcaggctgg gaacggcttc   540
catgcttaca agtcctgatg gaccatttat aaatatatct aggctgaatt taacaaagta   600
ttcccagaaa cctaagttgg caaaggcttt gtttgagtat atctttcatc atgaaaatga   660
tgttaagact gctttggatc tggctgccct ctccacagaa cattctcagt acaaggactg   720
gtggtggaaa gtacagattg gaaaatgtta ctacaggttg ggaatgtatc gtgaagcaga   780
aaaacagttt aaatcagccc tgaagcagca ggaaatggta gatacatttc tgtacttggc   840
aaaagtttat gtctcattgg atcaacctgt gactgcttta aatcttttca aacaaggctt   900
agataagttt ccaggagaag taacctgtct ctgtggaatt gcaagaatct atgaggaaat   960
gaacaatatg tcatcagcag cagaatatta caaagaagtt ttgaaacaag acaataactca  1020
tgtggaagcc atcgcatgca ttggaagcaa ccacttctat tctgatcagc cagaaatagc  1080
tctccggttt tacaggcggc tgctgcagat gggcatttat aacggccagc tttttaacaa  1140
tctggggctg tgttgcttct atgcccagca gtatgatatg actctgacct catttgaacg  1200
tgccctttct ttggctgaaa atgaagaaga ggcagctgat gtctggtaca acttgggaca  1260
```

tgtagctgtg ggaataggag atacaaatth ggcccatcag tgcttcaggc tggctctggg 1320
 caacaacaac aaccacgccg aggcctacaa caacctggct gtgctggaga tgcggaaggg 1380
 ccacgttgaa caggcaaggg cactattaca aactgcatca tcattagcac cccatatgta 1440
 tgaaccgcat ttttaatttg caacaatctc tgataagatt ggagatctgc agagaagcta 1500
 tgttgctgcg cagaagtctg aagcagcatt tccagaccat gtggacacac aacatttaat 1560
 taaacaatta aggcagcatt ttgctatgct ctgattgttc cttagaccac atatgttctt 1620
 atgaagcagc attatgcaag gggaaaaaag cactatgtct gtgtatgtat gtatatagtg 1680
 taatacgtat attttaacaa acctgtcctt gatattagtt aaggtagacac ataagggtga 1740
 cacagaatgt gtaatgcaaa tttcatagta atagtaactt tataaaataa tattataaaa 1800
 tacaggattt aaacctttct aaatagatcc taaaactgtc tctcacatta tatagtagat 1860
 gtttgtttat aatgtttaca aaacattttg gtgaatttcc tcaatgtttt ataatgtac 1920
 attttttaag tccttaagct gactcttagc catcatgtag ctttaaggagt ctgaaatctg 1980
 ccattaaaac tgcaccttta agccagggtg gtagcatgt gcctatagcc ccagctactt 2040
 gggagggtgga ggtgggagga ttataaatag agactttcct taagacttta aaaatgtatt 2100
 taaaactatt ttttattaaa tactttgtga tttcctatta agctttaaaa taaatcattg 2160
 tgtaaaacac c 2171

<210> 288

<211> 2510

<212> DNA

<213> Homo sapiens

<400> 288

ttgatgtgag gaaattctcc tgcgtggctg ctctgcact gcatggctct gagcatctgc 60
 tctatgtcta tttctgtcct ccattctctc cttgagaccc accacactg acatgggtta 120
 ttttcattgc tgcgtgatct cctgtctcca ttctctccct gagaccacc cacactgaca 180
 tgggtccattt tcattgctgc atgggtctctc gttgtctgag gggagcatgg gaaatgtctt 240
 catcttcccg tggatgagtg tttggccagg ttggggccct gaggactgcg ttttgctggg 300

aacattcttg ggcatttctt ttgtccacaa gtgcagggtg cttctggtca gtagctttca 360
agttttaaaa tttcatccca ggtaaaaaat gtaattttcc tcataaccca caacacacat 420
cctttcatat acaagcataa caaaaatata cttcacaacc attcttagca gtgcctggtg 480
ttcctgcttc tctccattct cccaacagc tgcattggatt ggggtggtggg atttttgccc 540
atctggtggg tgtcacgtga tatctccccg ttaggctgag cccctcttca tgttttcatt 600
agtcattcct ccacatttcc tcttttgtgg agggccggtt cagctctttt gccagtttc 660
tgttaagttg tttgaatfff tgcacttttc ttttattatt cctattgtta tgtgtttgag 720
acacagtctc actctgttgc ccaggctgga gtacagtggc acaatctcag ctactgcag 780
cctccacctt ctgggttcaa gtgattttcc tgccttagcc tctgagtag ctgggattac 840
aggcgccac caccacgcct agctaatttt tatattttta ctagagatgg ggtttcacca 900
tgttgtccag gctggtctca aactcctgac ctcaggtgat cctcccatct cagcctccca 960
aagtgtggtg attacaggca tgagccacca tgcccggcct gcatttttct ttttcaagag 1020
gactctttat agattatgcg tgctcattct ggtgactatg tgtgtggcaa agatgggttt 1080
gaatccacca ggatgaacgt gcaggatata ctctctggtg ggagaagaga cagagaggtg 1140
tagacgggta cagagaatca gacccgagag gaggccgagt caggcggggg ttgcaggctg 1200
ctgtgaggac ttggctcctt ctctgaggcg ggtgggatta gcaggggatt taaacggagg 1260
aactgtggga tctcccttat gcatttctgc catggttggc tcagctgaac gcacctcttg 1320
aacaagactt ggccttggac acccagaggc ccttggttga gggtttacct cctgacatgg 1380
ccactgacac atccacgttt ggctcccaca gggctgggcg gcccacagac ctgctctgcc 1440
tgggcctttc attggtggca tttctcaagt ttgtccctc tcaagtctgc tccctctgga 1500
aaaccaaaca cctctctctc ccacatggaa acccccatca gcacctccc caactcaca 1560
ggcatcccg caacatcaca gtcccgacct tcccacacgg acaagctcac gggaccccc 1620
gatggaccag gacagcgtga gactaagac atgccctgag actcacagga agagcggacc 1680
aagaagacgg gaacagcacg gggccctggg agctgcaa at gccacgata ccgtgagaga 1740
tggagaaaagg tatgacagga ggagcagacc aagaagacgg gaacagcacg gggcactggg 1800
agctgcaa at gccacgata ctgtgagaga cggagaaaagg tatgacagga ggagcagacc 1860
aagaagacgg gagcagcacg gggcactggg agctgcaa at gccacgata ccgtgagaga 1920
cggagaaaagg tatgacagga ggagcagacc aagaagacag gagcagcacg gggcactggg 1980
agctgcaa ac gccatgata ctgtgagaga cggagaaaagg tatggccatg gcggacacaa 2040

aatgttactc aacatttatac acaggcctaa atggagaaca taacgctatc aaacccttag 2100
acaaaaacac aggggaaaat tcgtacggcc tggggtagg cgaaaagttc ttagacatga 2160
caccaaaagc atgattcata aaagattgac aaattaaact taatcataca tttaaaatta 2220
taattctata aagcaatata aaaatccaaa gagaatgaaa cacaaactat ggtctagaaa 2280
taaacatttg tgaatcacac gtctcacagc ctactggcac gcaggatatg tgaagaacca 2340
tcaaaactta accataagaa agtaaaagcc ccagtattaa agagagggcc aatattggaa 2400
cggaggcctc atcaaagaag gtataaggag ggcatattgc ccgagaaaga ggctcaacgt 2460
catagagatg ctggagaaat gccaatcaac agaacctctg caaatctatt 2510

<210> 289

<211> 2383

<212> DNA

<213> Homo sapiens

<400> 289

ataaatagtt atttattaac atcattggc atttttaaaa aaaagaaaat aagaaaaaac 60
cgcagaagaa atgcattcac acagtcgcag agatgcaggc cttgccagtgt gtgtgccggg 120
cgcgggtcct gtctggcggc ggcctgtcgt ctccagggtgc taactcctgc caccgcgcgg 180
tgctcaccca cgtctgttcg cgcgctcgcc cctgggtttg ttgggttttt tggttttttt 240
ctttgtggtt tttttttttt tttttttttg tatgaaactt ggaggcttac aggtatagac 300
agctttcagc tacagcacat tctaattttt tattttgttt agttcttttg tattcacttc 360
tggctctctt aagactgttt taaaagaaat caatttaggg aaccccagtt atataatata 420
aacittgtaa tctgagagaa aaaatgtata gtaaactctaa gtcttgattt ttaactttct 480
attgtaaaaa ataataatat acagagtita atagaagggtg atgttttggt tttgttttcc 540
cagaggctgc catatggtct ttgagtacgg ggatgtccca aactggccca ccaatgagca 600
tggcggctcc ggccaggaat gccagagtta gcctcccagg cttgcgggtg gacatgcctg 660
ctccctgcca gcctccagtg gcctggccag gccctcccga gcctgtctgc cctccccagg 720
ggtggaggag tctctgggcc ccaggaggat tccctcccgg agactcgcac ggtgctccct 780

gctcacgcgt tgtcacagtt agtccggaaa tgactgaaac caggcattct cccggacctc 840
agcgtggggg agcctccagg cagacgctgg gtatggagct gtggtgtggt ctgtcctgta 900
tggtggccag tgctttctgc cagcatttct ggatggatat agggactatc attagtatcc 960
taatacacgg tgattttaaa acaaccataa aattgattca gagtccactg acccttacag 1020
atgtaggtat acccttactg gagagggaac tctgatgagg agatgctggt aaattatcat 1080
tttttaaatt gctggtgagt ctgacacttg gtgagttttc agccagtttg ttaaactttt 1140
aattaagttt tgtttataat aaaaatataa atggatttga aagtttccat tttttaaagt 1200
taccctcggt ttcaaaggta ttttctaaac agatctttta tggactatct aaaccgaatt 1260
taaggaattc acacacgaca gttgacaggt cttcacgcag gctggttggt aacgtgctgc 1320
cagcacaggg ctgggtgata cgtacaccct aagccggggg tgcctggggc tggggggcgc 1380
tccttgcaat gcccctccag ccacagggca gtgaggtgct gcctgtgtga gccgtcgggg 1440
gagcggccgg ctgtgggggc agcgcagcag gagcatcgtg gggcctttcc ttctcggtctg 1500
gttctctgtg acggtggcgt cggtctgcct ctgctccttt catctagaaa gaagccactg 1560
accctgacag cccacggcgg gtacactgag cagctgcatt ggtgctgtca cttttttaag 1620
gctttctgtc cagacttcaa cactggtttc ttttcagagt ttcgaaggat taatgacttc 1680
ctcagcgccc ttgctggcgg gctgaggggtg acagtcacgt ccgtttcttc tgtattagaa 1740
ggctgcggtg attcaattag attgtccac tgctgagacc tgtagggcag cttctaacat 1800
gcttttttca aggggagagg agtagtgaca agtcgtgtgt cggaattgga tttgagaaca 1860
ctctgaatga cccctggagg ccgagggggc aggcttcggg cgtgaactga actccagacc 1920
cctctttgtg ttgggcagtg tcatcttgct tacaaactgt aagacacatt tttttgtgtg 1980
tttgtttttg ttgttgttct tttgcagcac tcacgcctct gacagtcttt tgggaaagag 2040
taacaccac atacagaatt tgtcacatcc agagtagcac tgttccttaa tactggcata 2100
atgcttcag gaagtttttc ttttttatat ttaaaatgtt acttttctgt atgatgtgca 2160
tgcaagtta ccgtaacttt tcttaactt tttagtccg tttctagtat attcctgtaa 2220
atgtcagtta ctgaaaatga gtccaatgta agtagttag cttgtttatt gcaatgctgg 2280
cctcaacaca acagaataaa aatggtagaa agtactcttt gatgtttctg gtaatcatgg 2340
acccttctcc tggggcattt gttttgtttt cataataaaa agc 2383

<210> 290

<211> 1919

<212> DNA

<213> Homo sapiens

<400> 290

cctgaaggag acagggcctg agcggagaca tgtgctgggg gaagcactgg cccaggccgg 60
aggggaggaa tctggcttgc tctaaaggat cacctggctg gaggactgca gggcagggga 120
gcggttccta tgggtgcagct acactgggga aggggacaga gcagagggga gttggggcac 180
tccggagggg gttgctttct ttcacttggt tttgcctgag caactggacc agtggggctg 240
gcttttctga gatggggagg agcagatttg aggaaggaag gttgggctac agttcggatg 300
tgctgagtgc gaggccacg atgagcccca cggagatgct gaggagcaga gccctgaacc 360
tgggggcagc cactgtcttc aggaggcaca gggcacctca gggcacctct tcctatcagg 420
aaggaagaag ggcccatgaa gcaaccagtg ctgagtcaga tgatgacaac ggggtccagg 480
tgctagcctc gctagctgtg agctgcgccc aacactcaag acacaaggac cctgtaggca 540
cacagctgca gcaagcctgc gccaggtgc ccacctccag agcgcccctg tggccctgcc 600
cttcacacag attgatgcac agcacagatg ggctcttgga ccagaaccc ctgtctactc 660
tcctcccggc agcatagccc gaggaagctc ccaaagccac atcctggatc tgtacccct 720
tcagtggctc tcccacttcc taagagtcaa accagggtac cttgttgtgg ccagaagga 780
cctgttgagg gggtaaggag agaatagggt ggccaagttt tggcattggc agagcctgcc 840
tgacaagcat acttctttcc catgcagaac agacacctcc atctgctcag aactgtggcc 900
cgagccactt cctgacgcac atctctgagt aacagtgact aggactcatt ccggaaggaa 960
gccacaccgg aaacagcagc tctggacttc tcaatgtcaa acttcattaa ggccaagtac 1020
gagagataca acttaacttg agagacagaa aggtgttcca agcagtcagc tcctacaact 1080
agacacagca gggaacagag acttgggtctc agtccatca cacacacgct ggctggccat 1140
gggccagggg agaggtctgt caatcaacca caggaccaag gacacaagat ggacacagaa 1200
gcttcagtgg gccaagagag gatgccactg ccccttcttc cacagtgttt atcaaagatg 1260
tccatgcagc ttaaattatc taccctctgt gccacatgct agatagagac tctcaaattc 1320
taaacagtca acccaaactt ttttctttga gaacagggtc tcactatggt gccagggctg 1380

gactcaaaac acctgggctc aagtgatgct tgagctgagc ctcagttttc ccatccctac 1440
ttcacagaca atgctatgtg aagaaaaatg gaaagaactg tgggagaaaa gttgcagaat 1500
agcatagtac catttacatg gtttaaaaaa aaaaaaaagg tgtatatagg gaaaaaactg 1560
aaagtaactt cactaaaatc aaaactgaaa ggaactggac cgaaatcagt ggtagtaatc 1620
tctgaagagt agattattaa gaaactttca cttactatag taaacatttc tgtattgctt 1680
gaattcttta acagtgacta tgaatcagtc ctgtattcaa agaaagcaag gattaaaaaa 1740
gaaaaccaga taaaacaaca gccccacctg ctaaggatga gaatcaaaag cacaagtgtg 1800
aagccaggca cagtggcaca tgccctgtagt cccagctact caggagacca aggcaggagc 1860
atcacttgag cccaggtgta tgagtccagg ctgggcaaca tagtgaggcc atgtttctt 1919

<210> 291

<211> 3003

<212> DNA

<213> Homo sapiens

<400> 291

cgtcgaaagg tgagaaagac ccaacgggac acccagtatc gcagccacca tgcccaggac 60
aagtctctgc tgagccaggg ccgaaggcac ctgtggcgag cccgagaaat gccctggagg 120
acagaggctg cccggcaa atgtgggacacc aatgaggagg aggaggaaga agaggaggag 180
ggcctgctga agaggaagaa acgaagacgg cagaagagcc gaaaatatca gactggggag 240
tacctgacag agcaagaaga cgagcagcgg cggaaaggga gagcagattt aaaggcccgt 300
aagcagaaga cttcctctc ccaaagtttg gagcaccgcc tcaggaacag gaaccttctc 360
ttgcccaaca aagtccaggg gatctcggat tcaccaaacg gtttctccc aaataacctg 420
gaagagccag cctgccttga aaattcagaa aagccatcag gaaaacgaaa gtgcaagacc 480
aagcacatgg caaccgtctc agaagaggca aagggcaaag gtcgttggag ccagcagaag 540
acacgatctc ccaaattctc caccctcagt aaaccacag aacctgtac accctctaag 600
tcccgaagtg ccagctcaga ggaggcctca gagtcaccta cagcccggca gatcccccca 660
gaggcacgct ggctcatagt gaacaaaaat gctggtgaga ccctcctgca gagggcggcg 720

cgtcttggct ataaggatgt tgttctctac tgcctccaga aagacagtga agatgtgaat 780
caccgtgaca atgctggcta cacagccctg catgaggctt gttcccgggg ctggaccgac 840
atcctgaaca tcctgctgga gcacggggcc aacgtgaact gcagtgcgca ggacggcacg 900
aggccagttc atgatgcggt ggtcaatgac aacctggaga ccatctggct cctgctgtcc 960
tatggggccg atcccacact ggctacctac tcgggtcaga cagccatgaa gctggccagc 1020
agcgacacca tgaagcgctt tctcagtgat cacctctcgg atcttcaggg ccgggcagag 1080
ggatgatccc gtgtatcctg ggatttttac agcagttctg cgttggagga aaaagacggg 1140
tttgcctgtg acctcctaca taatcctcct gggagctcag atcaagaagg agacgatccg 1200
atggaggagg atgatttcat gtttgaactc tcagacaagc ctcttctccc ttgctacaac 1260
ctccaagtgt cagtgtcccg cgggccctgc aactggttcc tcttttccga tgtcttgaag 1320
aggctgaagc tttcctcgag gatctttcag gcccggttcc cgcactttga aatcaccacc 1380
atgcccagg cagagttcta caggcaggtg gcctccagtc agctgctgac ccctgccgag 1440
aggcctggag gcttggacga cagatcccc ccaggctcct ctgagactgt ggagctggtg 1500
cggtagcagc cagacctact tcggctccta ggggtccgagg tggattcca gtcttgaac 1560
agttgaccgg gaaaacagcc cctcctcttc tttctccttc cgagttcgcc ctccccccac 1620
ctccttgtct tccccgacc gagcaccaga ctgcagaatg aggcaataat acggaccaac 1680
aagaagccgc cttatcaatg ccagcattag cgactggact gtttttgttt ttttggttac 1740
aattagtct catctccctg tcgtcgtcat tgttatcgtg gttgctgatg ggggtggaaa 1800
gttgaactcc atgtctgagg acaagaggtc ccgggggtgg tgggaggtgg cgccggggtc 1860
ccttggactg gcctccttgt tcatgaccaa gaccaaacct gggccctgga tggccttggc 1920
ctgtcccag gagaaatgag aaaatcccag atctctgagc gcccccaac tccattcccc 1980
tgtgttcttc tgtctcctgt agtatatttatt ttattagtat ttaatttgta ttgtttcatt 2040
ggtttctgat aagtctgtat cactgtgacg atttgagaca acttgttgta ttgagggact 2100
ttctgtacct ctttttcttt ttctttgttg atgagctctg acaaagctat tccctggtgt 2160
ttttttcccc cactgggggag ggggtgaggt ggaatggggg gggggaacat ggacttgtga 2220
ctaacgaagc tggttgctgc tggcccaggg ctgggggctt gggggtaaat cctgaggctt 2280
tgggtgtccc ccaccaccc attcccgcc tttgcagcag ccccgtatc ttgagattag 2340
tgttgacagg gaggggagga ttgtgaggtg aggggttaat aagttactct aataaaggag 2400
cgtggagaag ggatctgagg ggtgagggtg gccccctcc tcacgccttc ttcactgccc 2460

ccctcagagt gcacaatacg agtttgttcc tgcctccact ctcccacccc gttctggcct 2520
 ccctgtctca agatactgag cctctcacct cccagccctc agccaccccc atccctgccc 2580
 cttctgagac tcacagcacc cttttccttc ctctcctccc acctcctccc tcagcccttc 2640
 attctccttg ggaatctgca gagggctctg ggactcactg ccggatgtga aatccaggcg 2700
 tcagctgttt cctaggcaag ggcaggaaag tggctctccag cccttgctcc agcgctgggt 2760
 ttgtcgagtg agagagagag aggagcttgg gttgcttccc tgtccccgcc ccctctgtgg 2820
 cattgtccct cccactctta tttttctacc aattgctatt tttccgaaca atccttgtag 2880
 agtatgtacc atccaaaggc aggagggcct cgccgtggcc ggctctgggt ggagatggta 2940
 cagttttatt gtacaggtgc taaaacaaca acaacaaaaa agaaaatgga aaaaaaaaag 3000
 att 3003

<210> 292

<211> 2172

<212> DNA

<213> Homo sapiens

<400> 292

aagggtgatg aacggggatt tcctggggac ctcccttctc tttattcgag agctcaggag 60
 atactgggaa ccaaaggcta ctgagggccg ttttgcagac acgtcaggca ggatccggtg 120
 tcctgggagc gcgctgtgcc atatcccaca tcgggtctcc tgtaaagtag ccgccgagcc 180
 gacatgcgtg gctgagggct tagctctgga cactgtgcct gagagtttcg tgttgagaag 240
 gagcccatat gcagagcagt gtgcagtcac ggggtgtgtg gcttcgcatc cggaaggtga 300
 gcctcgtgcc cccttcgact gagcacgctc ccgagggcac cgtgggtcag gacgtaactc 360
 acgtggcata cgcggcgccc cgcgcccagc tgctttcgct ctagcaagcc tgtttgggaa 420
 acatcttggt gccatgatgg tcttagtgct ctgtgtgcac atgctcctgt gtaagagttg 480
 acgggcgccc acctgaagga ctgcgtcagc aacaacagcc tgagcagcaa tgccagcctc 540
 cccagcgtgc agagctgccg gcgcctgcgt gagaggaggg tcgccagctg ggccgtgtcc 600
 tttgagcgcc tgctgcagga ccccgctcgt gtccgctact tctctgattt tctaaggaaa 660

gaattcagtg aagaaaacat tttattctgg caggcctgtg aatattttta tcatgttcct 720
gcacatgaca aaaaggagct ttcctacagg gcccgggaga ttttcagtaa gtttctctgc 780
agcaaagcca ccaccccggt caacatcgac agccaggccc agctagcaga cgacgtcctc 840
cgcgcacctc acccagacat gttcaaggag cagcagctgc agatcttcaa tctcatgaag 900
tttgatagct aactcgcctt tctgaagtcc ccgctgtacc aggaatgcat cctggcggaa 960
gtggagggcc gtgcactccc ggactcgcag cagggtcccca gcagcccggc ttccaagcac 1020
agcctcgggt cagaccactc cagtgtgtcc acgcaaaaaa agttaagtgg aaaatcaaaa 1080
tccggccgat ccctgaatga agagctgggg gatgaggaca gcgagaagaa gcggaaaggc 1140
gcgtttttct cgtggtcgcg gaccaggagc accgggaggt cccagaaaaa gagggagcac 1200
ggggaccacg cagacgacgc cctgcatgcc aatggaggcc tgtgtcgccg agagtcgcag 1260
ggctctgtgt cctctgcggg gagcctggac ctgtcggagg cctgcaggac tttggcacc 1320
gagaaggaca aggccaccaa gcaactgtgc attcatctcc cggatgggac atcctgcgtg 1380
gtggctgtca aggcgggctt ctccatcaaa gacatcctgt ccggactctg tgagcggcat 1440
ggcatcaacg gggcggccgc ggacctcttc ctggtgggcg gggacaagcc tctggtgctg 1500
caccaagaca gtagcatctt ggagtcaagg gacctgcgcc tagaaaagcg caccttgttt 1560
cggctggatc ttgttccgat taaccggtca gtgggactca aggccaagcc caccaagccc 1620
gtcacggagg tgctgcggcc cgtggtggcc agatacggcc tggacctcag tggcctgctg 1680
gtgaggctga gtggagagaa ggagcccctg gaccttggcg cccctatata gactctggac 1740
ggacagcggg ttgtcttggg ggagaaggat ccttccagag gaaaggcatc cgcagataaa 1800
cagaaagggtg tgccagtga acagaacaca gctgtaaatt ccagctccag aaaccactcg 1860
gctacggtaa ttccccacc tggccccacc tgtgccctgc tcctcccgt gtggcccccg 1920
cctgccctgc gcagtgcctt ggtgcttctt taccgcctgc ttatcactgt gtgtctcccc 1980
cacgctcctt ggcggggtct ctctcgtccc tgccgatgcc cagctccctc ttacctgtga 2040
aggactggct ttcttttctt ctgaggtggg agtggttgtg ccttaaagtgc tattcttggt 2100
tgtaatcctt atcattgcaa tggtttttct gcaatgcatg taaattctgt atcaatgcaa 2160
tctatttcat ag 2172

<211> 2958

<212> DNA

<213> Homo sapiens

<400> 293

cttcctgaga aattagtgtt ttatagtaat caatttaagg aaattcattt ttgtttttac 60
tagacagtta tgctacagaa aacagtctta attaatcaca cagtaaagggt ggtctcaggt 120
atttaggtca gtacaagctt ctgggttttc tttttttttt ttttttcct tcttttgtec 180
tgaggataat tagtgtgttg atatttgaca aggcaagctg tgactattgc ttgcaactgt 240
cagctgagat cttctagcta tgacactgaa aataagattc agagtcaaga aacatctttt 300
gaaagttttc ctccttgtag ccaaaccaag cgtattgttg aagacaacac tgggataatg 360
ggaaacttcc tggaagattt gggcattatt gaggccatgt gttcatcaaa tgaggacata 420
cggtagactca gttctcatca ccagattttc caggaggccc tgaatttcat aaaattctat 480
tcttatttac ctttttgtag tttagttaat aaattcagta tggtttaata tagaaataag 540
tttcaaacaa aaatgaggct tcaagtcaaa gtttgtaga gaatcccaat ttttaatcca 600
gaaaagaaga ctaggcttgt tgtatagtgt acagtaccct gtgtaagatc tataaccatg 660
tatgtacctg taacgtacta cttgtattat tcaaagttaa aatacaaaact ctgagtatgt 720
taatatgact tctccgttcc tccaaaattg tatatgaatc cctgcttaag agttcttgaa 780
gagctcttga ctttctctg tcttgagtga acacttctat ttagaatcta aaaacagtaa 840
gcaaaaataag ccatcagtaa atgctacaca aaagttactc tgtgcccaat agaaactgat 900
gcaaaaactac caagatttag tgaataaaga atatatcaca tcattgcaac agtatgactt 960
ggatttgagg actagaacct aaaccaaagg cacactctgg gatcctgggtg tctttgtttc 1020
cagcatgagg acatgaaatc tgctgtgctc attggctgggt cttcagtgcc tagccctgtg 1080
gctgcaatac agtagataca tatttactgc ctgagtgagt gagtgaagggt gaggcctgaa 1140
atcactgtac caagtagaaa aataatttct acatttaggg aaaacaaatg tagagtgtgt 1200
atgtgtcaga cacctgacag gtttaagtga gctttacatc ttaatggaaa tagttctgca 1260
aatgaccatt tataacttac agttaacact atacaagtca atctgtagtc ttttgattgt 1320
gtgaatcagc actaaagaag acactctgac ctaatctgca ttcaacctca actaatgtca 1380
gtgaccagg acagaccttt tccaagcaaa ggccagttat tattaaaagg tctgtgagaa 1440

gagcacacaa cgaaatatac cacagtgtga gtgaaccctt taagttaagg gttgattgat 1500
tagaaagcat aacaaccact gataaattta ttaatagagt ataaagaggg aagctggaga 1560
catctcagag aagagaacgc aattgatttg agaactactg ggaaccacag attttggtgg 1620
ccaaagcctt agagtcagag gaatccaaag ttgtctgtgt gtgttcttca gagctgtatc 1680
acctcactct gactttgcac ctcaagtga aagttctaata tctatttcta cctttgcaaa 1740
cagggttatt actgcaactg acactttcta atttttcttt caggccctgc tgcaaaaaag 1800
aagtatgtca gttataataa cctgggttate taacctgttc cattccatgg aaccatggag 1860
gaggaagacc ctcaagttatt ttgtcaccca acctggcata ggactctttg gtcctaccgc 1920
cttcccatca ccggaggagc ttccccggcc gggagaccag tgtagagga tccaagcgac 1980
ctaaacagct gctttatgaa atatacctac tttatctggg cttaataagt cactgacatc 2040
agcactgcc aactcggctgc aattgtggac cttccctacc aaaggagtg ttgaaactca 2100
agtcgccccc tggctcttta gaattggacca ctgagagcca caggaccgtt ttggggctga 2160
cctgtcttat tacgtatgta cttctagggt gcaaggtttt gaaattttct gtacagtttg 2220
tgaggacctt tgcactttgc catctgatgt cgtacctcgg ttcactgttt gttttcgaat 2280
gccttgtttt catagagccc tattctctca gacgggtggaa tatttgga aaattttaaa 2340
caattaaaat tttaaagcaa tcttggcaga ctaaaacaag tacatctgta catgactgta 2400
taattacgat tatagtacca ctgcacatca tgtttttttt ttaagacaa aaaagatgtt 2460
taaagaccaa aaactgtgct gagaaagtat gccccaccta tctttggtat atgataggtt 2520
acataaaagg aaggtattgg ctgaactgaa tagaggctct gatctttgga atgcatgcca 2580
gtaatgtatt ttacagtaca tgtttattat gttcaatatt tgtatttggt ttctcttttg 2640
ttatttttaa ttaggggtata tgaatatatt gcaataatt taataattat taagctgttt 2700
gaaggaaaga atatggattt ttcattgtct gaggttttgt tcatgcccc tttgactgat 2760
cagtgtgata aggactttag gaaaaaaagc atgtatgttt ttactgttt gtaataagta 2820
ctttcgtaa tcttgctgct tatgtgccaa tttagtggaa aaaaacaacc cttgctgaaa 2880
aattccctct ttccattctc tttcaattct gtgatattgt ccaagaatgt atcaataaaa 2940
tactttggtt aacttttt 2958

<211> 2029

<212> DNA

<213> Homo sapiens

<400> 294

tgtaatccca gctactcagg aggctgaagc acaaaaatcg cttgaaccg ggaggtggag	60
cttgacgtga gctgagattg caccactgca ctccagcctg ggtgacagag tgaggccctg	120
tctcaaaaaa aaaaaatgta ctttacacaa aaaactacac acaaagtata taatttgata	180
actttttgac atacatatat agccatgaaa tcatagctac agtcaagata acaaatgtat	240
ccaccacccc aaaaatatcc tcacacctct tattcctggg cctgcttgcc ctactccata	300
ttcaggacgc agtcctaagg caatccgctt tctgccatta aagactagtt tgcatttctg	360
aaattggact cagcattttac tcttccatca tctggcttcc tactcaacgt aagtattttg	420
agattcatcc atgttgctgc atgtctcatt gggtcattcc tcttcattgc taagtagtat	480
tccatcgcat ggatgtacca cagtgggttt atccatttat ctgctgacgg acatttgggt	540
tcttttcagt ttgtgattat aacacataaa cgtgctatgg agttcatgtt ttaatctttg	600
tatgaacaca tgatttcatt tctcctgggt atataccag ctgtcaaag cctaggtcat	660
atgatagggt catgtttaac tatttaagaa actgccagac tgttttccaa agtgattgta	720
acattttacg ttgttaccac cagcagctat gagagttcca ggtgtgctgc gtcacacctg	780
atgcttgcca tgggtcaatcg ttttgagttt agatattcca acaggtgtgc ggtgggatct	840
cactatgggt tcaatttgca tttccctaac aaatgaccc gagcctcttc tatgtgctgc	900
tttgccatct ggatatctta tttggtgaca catctagtaa aatcttttgc tcattttggg	960
cagttgttac cttagtattg agttttgaca gtccttttta tattctagat acgtccttta	1020
ttagatatcc attttgcaaa gcctgtaact tgccttttta tttttttaac agtatctttc	1080
aaaaacagaa gttctcaatg ttgatgaagc tcagtttata aagtttttcc tttatgtatt	1140
gtgttttttg tattgtgtct aagacatctt tgcctgagat gagaagttgt atggtttaag	1200
gttttacact taggcctgtg gtccattttg agtttgtttt tgtacacagt gtaaagtatg	1260
aattaaagtt tggtttattt tttgcatata gatattcaat tattccagca ccatttgttg	1320
acaggctatt ggtatggctt aaaagtttgt accctctgca gatttgtatg tagagatcct	1380
aatccccgag gtgattgtat taggaggtgg ggtgtttggg gatcttatta agtcatgagg	1440

gcagagcctt catgaatgcc attagtgcc ttataaaaga gcctcagaga cctgccttgt 1500
 ccgttccaca ttgggaggac acagtgagaa gactgtgagt ctatgaggaa gcagagcctt 1560
 ggccagacac cgaatctgct gccaccttga tcctggactt ctcagcctcc agaactgtga 1620
 gaaatacatt tatgttgttt agaagcgtac agattatggg atttgatcat agcagcctga 1680
 gtggactcag acaaccatac tttctcaact gaatcgatgt tgcacatttg ttgaaaatca 1740
 atcgtccata tatgtgtaga tctatctctg gactgtgtat tctgtttcat tgatctagtc 1800
 tacctttgtg ccaatgctat acagttttga ttactaaaga ttataagttt tagaatcagc 1860
 tagtgtaaac agtgaaaatc actgagagtt cagaagttaa agttgtactg cggtttcaaa 1920
 taaggactt aatggtcctt tttcatcatt cagcatgaat atcccctacg tatctctgaa 1980
 gggttgatttt gttctttatt ttaagaataa aataacgttg tgaacagct 2029

<210> 295

<211> 3691

<212> DNA

<213> Homo sapiens

<400> 295

catcaacaga tcagctcttg tggtcttcat attctctgtt tggggcttta gtcttccaga 60
 agaggaaact ggggcctaga ctagttaagg tcatggagct aaggagggtg gaaccaagct 120
 ggaccccagg tcagccctta gccaccttca tatccagcaa agccacttgt tccctgggga 180
 gggtgcagag gctacaagct cagccttcca ggggtgccttg ttcctgtctg cccccaggt 240
 acaacagtgg agggaaggag cagggtgagc tgtgtggaga cacggacccc accacctca 300
 cccccagctc caggcagcag tggtctagct ccagcactgt gcctttaaga gaccaatccc 360
 ttggctgggg atacctgttg ccatggagat ggtggcctga atcccacagt ggagggtgc 420
 tgttgccagc ccccatccc tggctgtgag gggcctcaga agcccatcca gaccctaccc 480
 ttgacagccc accactgttc ctgggcccct tcccttaggc ggccctccaa cccacctca 540
 ataccatcag aaacagtcca gggcaacatt tctgggacac ctaagcagat aggtagaaag 600
 acactaagag gccgggcaat gaagaaagaa aagaatgctt ggtcctggtc taatgggcca 660

cacctttcag tgggtgggat ctgtttccaa gcccgttcca gctcaggcag gcagtgccca 720
ctccctccac acgtggccct cctggctccc tcgtttctat cagccccctg gcctaggaga 780
tgctgggggc tcaggcctgg gcctacctct tagctggcag ccctcctccc tggggagcct 840
gggggcagac agggccaggt tcctgcagga ctgtgggcac cagtggccag aggaggtgat 900
accacacagt gacagcacta cacagaccct gcctgtcacc ctcatgctga ctcccattct 960
agaggagtgg agctcagaga ggtgatgtaa cttgttgagg cctcacagcc gggaactggc 1020
acagtccaga ttgaaccag cctggctgac tccgaagctg gggctcttta catgatgtcc 1080
tcctccaccg cccactggca ccagtggctt gtcattgtct ccaacagagg ggcctggcag 1140
ggaaaagctt tcctcccacc cagcatgcca gtgtctgagg gcctgaatat ccaggatagc 1200
agcccagggt ggggcccaga gccctggtac tggactttta cccgcacccc tatgtgcca 1260
tcaaccagcc accatgcca cacacagggg cttggcctca gcaagtgcc agctgcgcct 1320
gaggtcagca gcccagacct cggcagtgga agtgcagctg acaagtcctc ggcttcccgc 1380
ccagcctgga caaagccaga gttgttcagg agcctcaaac gtctattaca cagccctacc 1440
cccaggacag atcaaagggg aaggggctgt agatggagag aacggagggt ggaatcgggt 1500
gcaagggggt ggaagaggct ctgcaggctc tgttgtccct gcaggtggtc ctggttcacc 1560
ctgtccccag cattcccacc tccagaaaca gcccactact gtcagattga atccaaaaac 1620
ccaactccca acaaggatga agcaactctt gcctttactc cgaggttctt caggtttcta 1680
gggctgtaaa caactgcttc ccctaagca tttaacgttt gatttgattt ataagaaatt 1740
gacttgacca caacagtcc aggcagagtc tagggaagct gcacttactc ctagctcat 1800
ttcagggaag ttggcagctg aggaccctgc gaggggagcg ggtggaattc ccaggagct 1860
ggctgggtgc ttcccagctc cccctccact gggacaccag acacctgggt gaccaaccag 1920
gaatgggcca tgaatagcaa ggcccaggct tcaggggcca aggcagaggg aaagatgaag 1980
gcctgagata ggagtcccc caaggctcac tcaaacctgc ataagacctt ccagtggctc 2040
cccaccgccc tccagagaaa acccaggttc ctcaatggct tccgaggccc cgcaggagct 2100
ggcctacctt tcagcctcac ctaccccac ctctcctct ttaacacat tccttccttc 2160
cgataacccc acacacaaa cctccaggcc tcggcacgtg ccgttcctc cgcctgagac 2220
actccacgca cacacatcct ttatgaggct aactcaagca tcctccaagt ttcagctcac 2280
atgtcacttt cccaaaagc ctttctgag ccctccatct gggtcggatg ccacctctgt 2340
gagcccgtgc ttccatcgcc tcaggcttag tctccctgcc tcctgctcct ggcctagggc 2400

tcctcactag actgcaggct ctgggagggc agaggccctg tgtcactcat catggtctcc 2460
ccagtgtac acagaagttg gttggtaaag atgtgttgag tgaatgaatg ggagagtgc 2520
gccctgccta gagagaggct tccaccacct gctctcaatt tcctgtacgt ggggtgtgcat 2580
cgggtgcacat atgtctgggg atggggaggg tgaagccaca ccaaatttc ttcccaaac 2640
taaaaaacgg ctgacaaaag catcagggga taattcataa atgacttcct tttgctttgg 2700
gactaattgt gcttggcatc actgaatgct agctcaagag gtgtcccaa aagattcggc 2760
cagcaggga gcactttatg tgtgccaggc actatgtga gcaatttcta tgcctatcta 2820
gttctagaag gcagggactg tttccattat cctcgtcgca cagatgagga aacaagtta 2880
cagagtttaa gctacctgct ctcggtccca cgaagtcagg aagcggggga gctgggattt 2940
gaacctcca gagcttgagg ctgaaccacc aggcagcccc acctcccctc cactggtgta 3000
ccctgaggcc aaggggataa ggtaaggcag gaggtagaga atggccttat ctgttcttgg 3060
acatcagagt gggagagcct gataagaggc cccttgcccc cactcctgca ggtagagat 3120
gtcagacat ccctgaggt cacacagcct ggggtgggtga cagagctttt ccagcagaaa 3180
ggagccagga ggtggctgcc tccccaggc cgggaggacc aagtcgcagc aaaagtggct 3240
gggatgtcca gaggactagc accaggtgct tgggcctcaa gtccttctgc ttcttcctc 3300
tggggagctc tccgcagctg ctccccagaa cacacaaatg cccttcctgg ctttctctgg 3360
ggcccaaacc ccctcagacc tgggtccagc agatacagac ccacctctcc ccaggacct 3420
ggttctgcc cagtcctgcc ccagctctgc aggtgcagct gtgaaaggc cctggcgcta 3480
acactgggct gcacgccgc tcctgcccc acatttttcc ccttaaaca acatgcaaga 3540
ctttctttt ctatccctt gaaagcctgc tcagggtgga caagactggg tgggacaatg 3600
gcctggcacc cgaacaggag ggagtgaag gtgaagcctg cctcttgctg tgccctctct 3660
agccagttct agcccagcaa accaggaat t 3691

<210> 296

<211> 3686

<212> DNA

<213> Homo sapiens

<400> 296

atcagggagc acaccacagg gctcccgggg gcaatgacca cctctgcggc acccctgagg 60
acagatacca tatggctgcc atgctgaacc cagtccaggc cccatcatgg tctgaccag 120
atgaccaggg gaaatcaagc tggcaggagg gtgcgcatag tgaagctgga ataatgcccc 180
aaacacaggc tggctctcag cagggccagc cttcccagcc acgaccccg ctcctaccat 240
ccctgcccag cggccctagg cacctacctt ctcccaaccc tgcctgggct ctcaacaaaa 300
atgtaatgag gcaggtacga ttgttcccat ttgcatttga caagaaggga ctcacagagg 360
ggcccaaggc cacgtgagtg ccacaggga acaggatttg aatccagcag gctgcctccc 420
tctagtgcaa cccaagact gacctggctc tgatctcaag gcagttcaac tccaagttca 480
aaaggaaggg ggacgagggc tcagctgtgc aattggcctg agagcctcag aggtcagtgg 540
tccaaggctg gagacttgca gagtagagga caaaggcg tggagcaggg gctgctccag 600
gccttggtca tcacaacagc tgccaggagg ccacagatgt agcagaaaga gcagaagctt 660
cagaatcaga atcagacata cctgcttgac tactcataag ccatgtgact ccgaacagat 720
cagtcaacct cttggaccat caatttcttt acctgtaaaa tggggatgag agtaatacta 780
agaggaccta cctttcaggg ctgagcatgg gttctctgtg aaaacgctgc tggagaagta 840
cacagcggag cccatcgatg actcatcgga ggagtttgtc aattttgcag ccattttaga 900
gcagatcctc agccaccgct tcaaaggctc agtgagctgg ttcagctcag acgggcagcg 960
gggcttttgg gactatatcc ggctggcctg cagcaaagt cccaacaact gtgtgagcag 1020
catcgagaac atggagaaca tcagcacagc ccgggccaag ggccgggcat ggatccgggt 1080
ggcactgatg gagaagcgca tgtcagaata catcaccag gctctgcgtg acaccggac 1140
caccaggtca gacttcccag gcaactcaga ccacaggtct cagagtgcac ctgcattgcc 1200
caaacacagc tgatccttaa gttcctgcag catccttcag ttcctggact acaagtccca 1260
gcaccagcac acatggctga tttccctctt ccagcctggc ctgcagtccc aggacgaact 1320
cttttttttt tttttttttt tgagaaggag tttcgctctt gttgcccagg ctggagtgcg 1380
atggcgcgat ctcggctcac tgcaacctcc gcctcctggg ttcaagcgat tctcctgcct 1440
cagcctcctg agtagctggg attacaggca tacgccacca tgcccagcta attttgtatt 1500
tttagtttct ccatgtttgt caggctggtc tcaaactccc aacctcaggt gatcctcccc 1560
ccttggcctc ccaaagtgtt gggattacag gcatgagcca ccgctcctgg ccccaggaca 1620
aacttttacc accaccacca ccaccacttg caagtcaaat ctaatgcca ttatttgcca 1680

tcaatgccca gcacgtcca cccttgacaca cctctggatg agcctcagcc atgcaccatc 1740
tcaagtgttg gcttgctcca tgatctacaa cacagccctt ctgtctctcc aaacaacgaa 1800
agcagttctg tacttgctat tcacggacac agagtcctta tatggggagt tcaatccctg 1860
cactgtgggt tcacagggag gttgggtgcc tgaggcaagg ggttacaagg aggagtgtgc 1920
ctgtgtgggc aggtgcatct gaagctgtct ggggtgtggcg gggggcatat acctcccat 1980
cccaattggc cataccagc ctgatgtttt tactgaattc cattcctcag tctacacgtt 2040
tcaagttaac acgttttttg cgcacctact gtataccaag cactaatgat taagacttgc 2100
ttcctgatat gaaggatctg ggtaaccag tacttgatga ggaaggggta gctcagaggg 2160
aggagtggc tcaggaaca ccattctag gtgatggggc cacaggtgcg agccccaggc 2220
tgaaggggga gagaggctcc aggcctgcgt gcagatcagg aaggagaatt ggccttcctt 2280
caggatgggg tggcagtaag ccaacaatag cagctctggg gggggggggg gcgctccagg 2340
ggcctgctgc acctctggc cctctgcctc cccacagacg gttctatgac tctggagcca 2400
tcatgctgcg ggatgaagcc accatcctca ccggaatgct gatcggactg agcgccatcg 2460
acttcagctt ctgtctaaag ggggaagtcc tggacgggaa gacccccgtg gtcacgatt 2520
acacgcccta cctaaagttc acgcagagct acgactacct gacggacgag gaggagcggc 2580
acagcgccga gagcagcacg agcgaggaca actcgcccga gcaccgtac ctcccgtcg 2640
tcaccgacga ggacagctgg tacagcaagt ggcaacaagt ggagcagaag ttccgcatcg 2700
tctacgcga gaagggtac ctggaggagc tgggtgcgtc gcgcgagtcg cagctgaagg 2760
acctggaggc ggagaaccgg cggcttcagc tgcagctgga ggaggcggcg gcgcagaacc 2820
agcgcgagaa acgggagctg gaaggcgtga tcctggagct gcaggagcag ctgtctgac 2880
cccagtgacc acgcccctct ggcccagggt tccaaggagc tcaactacac cctgggtcaat 2940
caatggccct cactgggaac gcttaatggg gccgaggcg ccagcaactc caagctctac 3000
cggagacaca gttcatgag cacggagccg ctgtcagctg aagccagtct gagctcggac 3060
tcccagcgcc tgggagaggg cacgcgggac gaggagccct ggggtcccat cgggaaggac 3120
cccacgccct ccatgctggg cctctgcggc tccctggcct ccattcccag ctgcaagtcc 3180
ctggcgagct tcaaatccaa cgagtgcctg gtgagcgaca gtcccaggag cagcccagca 3240
ctgagcccca gctgaggaac agcatgggca gtgccagccc cacctgccag gggccatgga 3300
cacctgccac ctttcttcaa caagagtcct ccaatccagg ctacccttcc agagaacgct 3360
accacccag ccagggttct ctgggggaag atctcgtctg ctcaccttag ctttctgcct 3420

tggcagcacg ggctgcgga gaaagcacgc tgggccagga ggcaggggtg cccaagccac 3480
 agggagcccc tggggaagcc tgctccattc ttctggtgac cttggcgctc cttcactcat 3540
 ctccccctgcc ccctcaggaa ctggtggccc agcttccaca ccccccacctc ccagtctcta 3600
 gcctctccat ctgtctgtgt atggcctgga gtcactcctt cctcagcccc cagggaaga 3660
 gagctcaaat aaaaaccaga ggactg 3686

<210> 297

<211> 3898

<212> DNA

<213> Homo sapiens

<400> 297

gattcagtag atctttacaa gaccatatct gcagggcaag gtaccagagg acagaggcgg 60
 ggacagggac acttccattc cagacctagc agcccagcac tcagcaccat gcatgggagc 120
 aaatggctgg actcctgggt ggggtggggg tctcagagca ggctcccaga gggcttgag 180
 gtgactccac caggtgggga cggcagctcc caggtagggt gtcacagag tagacagcat 240
 tgcttgctag ggaccctgg ggaggctgac agggtcagt ggtttcagtt ggggggctcc 300
 cctgctgaga acccagtaaa gccggccttc cattcgcttc ccgtgtgccc agagccaggt 360
 ctgagggccg ccctgtgcat gccggccctt ccaacgtggc agagctcagg gggaagaaca 420
 cccaggctct caggagactc tcaggccaat gtctccatcc ctgggtcagc cttttctgc 480
 catgaattca ggaaggcaga ggcagctcag cagatgggga ctagaggccg cactgctatc 540
 cacagcctct cttctcacc ccaggcatgt cgggccccag gcctgtggtg ctgagcgggc 600
 cttcgggagc tgggaagagc accctgctga agaggctgct ccaggagcac agcggcatct 660
 ttggcttcag cgtgtcccgt gagtccagg ctctcgtgga ggggtgctga gacctcaagg 720
 ctgctgagta gtcctagcac cgtgagcagg ccaggagccc aaaccaaca ggcacaccca 780
 ccctgcagac tgtccgaact cttgcacact cccccaca cagaacctga ggttatcaca 840
 ctctgtgtgt cctgcgtgcc tgtgtctccc ttccctgggt ctgttgagta ctgataactg 900
 ggccacagtg tttctttctg ggagaacct cgcctttag gctcctgcgc cttcccagtg 960

gtgtgcttca ctggctgcct gcatcctggg gctcaagtgc tgtcgggact gcaagggaaa 1020
cgctgggtgg ggcatagggc tccgagcagc ccccgatggg tgacaggtct ctctgctaga 1080
taccacgagg aacccgaggc ccggcgggga gaacggcaaa ggtgagtggg gtggggccct 1140
atggctggag cacccccagt gtgggcaggg ctgctgggcc ctgcagctgt gttggctgtg 1200
ctgcccgtct cctgccccca tcaatcccta atctgtgaga tgggtccttg cctccaaggg 1260
ccggtgaact caatcagggt gtcagcgcca cagcgtgggt tgccttcct tgggtacagt 1320
gtgagaggcc ggccaaggcc tggggctgtc ttctccccc cttggaggcg gccacagtgc 1380
tgctgtcccc agccctgtcc tggactcggc acttatcagc acttttgagc tgtcttctgg 1440
ggtcctggta aaaagggtta ctctgcctgc ctgattcaag acaagggacc cccttcccaa 1500
cagcaccccc gcccttgcc gtgcaaccca gtggtctcca gtcacccac cacatcgcc 1560
cctctgtaac ctgacggtct ccagttcccc caccaccttc cccagaacc tgttgggtctc 1620
cagtcctcat cccatcacca ccaactccca actccccact ggaaccagc agtctcgat 1680
ctccatcagt gaggacggtg tgagaaatgg tgtctggctc aggcacttg cagcacttga 1740
ggggtcctca gatgtctct gccagcaag gatctgacta aagcagtcgt ggggtgtggga 1800
ggggcctgca ggcatgcctg ggttgggggc agctggccct gggcacctg gtgcaggtcc 1860
agtctgccct ctggatggcc cctcctcttc cccagattac tactttgtaa ccaggaggt 1920
gatgcagcgt gacatagcag ccggcgactt catcgagcat gccgagttct cggggaacct 1980
gtatggcacg aggtgggcca tgcgtgggtg tgggtgggct cccagggttg ctgttggcaa 2040
cagggatcca ggtagtgcct gctgcctgcc cgccatccac accaccacc ccatggttat 2100
gaatgtggcc aggttgtggc ccagggccag gctccacagt ctgtggcca cagtggctct 2160
tttcatgagg ctgctgggcc cggctcctgcc accgtgcatt gtcctggcag ggtgaagggt 2220
gcacaggaca cctcatgctc actacaggca ccttggggag tgggtggcct ctgttccctg 2280
taggcggggc agggcgtggg ggtagcaggt ttgagatgct gtcgggtgct ggggccaggc 2340
caggcctagg ctgagctgtg ggaggagaac gctgggcccg ggagggcctg ggtgtccctg 2400
aagctcctgt aggcctcaga gagccctggc acccctgctg acctggcacc tctccccaga 2460
cccccatcg cccagggtcc catgagatgt ccccaacctt ctagccccgg cgggtgtcatg 2520
tgcatcctct tacagctgtt gcctcttctc tgggtctgac tgcagccac aagaagaggg 2580
catttaatgt tctgctgtgt gtgtagagga tagttagacc cctaaccaga gtcctgatgg 2640
gtgctggtgt ccagacccaa ggtctgtggc accagggacc ctgtgggtcc ccagacctcc 2700

tgacacctgg agtcctgtg agggctctca gacctctcaa ctacctcca acacctagag 2760
tccccgtgag ggtccccaga acccaccccc agtcaccaag ggtctcattg agggctctca 2820
gatttccctc tgttaccag agtctccgtg agggccccca gaccccccat cgcccagggt 2880
gtgcggaaca tcaaggccac cgatctgcgg cccatctaca tctctgtgca gccgccttca 2940
ctgcacgtgc tggagcagcg gctgcggcag cgcaacactg aaaccgagga gagcctgggtg 3000
aagcggctgg ctgctgcca ggccgacatg gagagcagtg agtgtgccgt gggatcacca 3060
gggaatgcca ggaggggagt cagggttctg aggtctgtgg caccaggga cctgtgggtc 3120
cccagagaga gcaggagtgg tgcctgagga ctgaggccca gggggcggcc cttccctacc 3180
ctgcacaggc ccggctgggc tggaaagctg tcccacagcc gcagtgagga cagccgcagg 3240
ccagtgggct gctctggggg tctgtggga cctgggggtg ggctgcatgg gctcactgtg 3300
ccctgacccc aggccccacc cacaggcaag gagcccggcc tgtttgatgt ggtcatcatt 3360
aacgacagcc tggaccaggc ctacgcagag ctgaaggagg cgctctccga ggtgggcccc 3420
tccttgtgcc tacctgggca aggcccaagg ggaggcctgg gggccaggcc tttgttgtcc 3480
atgaggccac tgaggttaga tgggacagtc ctaccaagc actggcatga gacaccgagg 3540
tccacggtgg agggagagca ggaagcccag cccttcctgg ataccagccc tcccaactcc 3600
ctttcttcct cactggcagg aaatcaagaa agctcaaagg accggcgcct gaggtttgct 3660
gtctgttctc ggcaccccg gcccatacag gaccaggga gcagcattga gccacccct 3720
tggcaggcga tacggcagct ctgtgccctt ggccagcatg tggagtggag gagatgctgc 3780
ccctgtggtt ggaacatcct ggggtgacct ccgaccagc ctcgctgggc tgtcccctgt 3840
ccctatctct cactctggac ccagggtga catcctaata aaataactgt tggattag 3898

<210> 298

<211> 3467

<212> DNA

<213> Homo sapiens

<400> 298

aagcgccgc gagccgccg ccgggaggga tccgggtcct gaagagaaat atgaaacgca 60

atgggagcag aaattgtttg aataggagaa gtaggtttgg ttctcgagaa agagactggc 120
taagagaaga tgtaaagaga ggctgtgttt acctttatgg agcagacact accactgcca 180
ctacaaccac caccacctcc tcttctcttt cctcctcctc ctcttctctt gacttacatc 240
tcgtcctttg cactgtagag acaccagcat cagaaatatg tgctggagag ggaagagaaa 300
gtctttattt acagcttcat ggagacctgg tcaggagact ggaacctact gaacgacctc 360
ttcagatcgt ttatgattac ttatccaggc tgggatttga tgatcctgtg cgcatacagg 420
aggaggctac aaatcctgac ctcggtgtga tgattcgatt ttatggtgaa aaaccatgcc 480
acatggatcg tttggatcga atcctattgt ctggcatcta taatgtacgc aagggaagaa 540
cccagctgca taagtgggct gagcgcctag ttgtcctctg tggtagctgc cttatcgttt 600
cctcagtga gattgtcaa actggaaaga tgcacatttt gcctctgggt ggtggaaaga 660
tagaagaagt gaagcgacgg caatactccc ttgctttcag ctcagcagga gccaagctc 720
agacctatca tgtcagcttc gagactttgg ccgagtacca gcgatggcaa cggcaagcat 780
ccaaggtggt gtcccagcga atcagtaccg tggatctctc gtgttacagc ctcgaggagg 840
ttcctgagca tctcttctat agtcaagata ttacctacct caacttgca cacaacttca 900
tgcagttaga aagaccgga ggcctcgata cactctacaa attttctcaa ctgaagggcc 960
tgaacttgct ccataataaa cttgggttgt ttcctatatt gttatgagag atctctacct 1020
tgactgagct caacctttcc tgtaatggat ttcatgacct accaagtcaa attggcaatc 1080
tgctaaatct tcaaaccctc tgtcttgatg gcaactttct gactacttta cctgaagaat 1140
tgggaaatct acaacagctt tctccttgg gaatttcctt caacaacttt agtcaaattc 1200
ctgaggttta tgagaaactc actatgttag atagagtggg tatggcagga aattgcctgg 1260
aagtcctgaa cttaggggtg ctgaatagga tgaaccatat caagcatgtg gatttaaggt 1320
aaggttattc tttaccacac ctctctttaa attgactctg gtggaccttt atgtcttctg 1380
tttatgaaga tttgtttaaa acattagggt ttttaaaatt ttgttgttgt tttgagacaa 1440
ggtctcactt tgtcaccaa gctggcatac agtggcgaga tctcgccca ctgcagtctt 1500
gacctccgt tctcaggcga ttctcccacc tcagcctccc gagtagttgg gacttcaggt 1560
gcgcaccacg aggcctggct aatttttttc tacttttggg ggagatgagg tttcaccatg 1620
ttgtgcaggc aggtctcgaa ctcttgact cgagcagtc acccacctcg gcctcccaaa 1680
gtgctgggat tacagccacc gcacctggcc cataacttta gggtttttga atagtgtaga 1740
aatatatgtt ttcaaaggta tagtaagact ttatttatca ctcagtagca gagagattaa 1800

ggatcaggta gttgtacat gtgatagaga ctatcaaatt gcctttgaca aagattgttc 1860
tcacttaccc tcccatcagt gtatatTTTT tattttaaaa attttttata gaggtggggt 1920
cttgctgtgt tgcccaggct ggtcttgaac tccctggctc aagtaatcct cctgccttgg 1980
cctcctaaag tgttgggatt gcagggtgtga gccagtgtgc ccgaccctc caccatttta 2040
tgagaattcc cattttctca tatctttgtc agtattggat tttagcattt ctttttattt 2100
atcatcagtc tagtaggttg aaaaaagtat ttcattgttt taatcaacgt ttatttacat 2160
agcagtgagg ttgaacatct ttttatatgt atattagtag tttgtagatt tccataaatg 2220
accatttttc tgttgagtca ttgggtttct tcttgatacc cattgtatta caattaaaat 2280
gttaagggtt tcattactaa gaacttttta tgagagtttt attttctagt cataatatTT 2340
tcctaaagga agctggtaaa aagacaccta ctggatgttc tgttatttac agtaagccat 2400
tgatgtagct tgtaaagaca gtaagagagt tttttttttt tttaaaccac actggagact 2460
taagagagag attcatagaa atacaggaaa gtgagaatag acctgcataa attaaatcat 2520
acacctgtgt agaaaaaac ccagagggtca ttttctataa tttgcctttg aactcttcca 2580
tatatatata tatatatatg tgcagattat ttccttgtct gttaattaat tttatgtttg 2640
aaccttagct ctagagatag agcaggcata gcaacaggaa gaagtatggc tccatcctta 2700
tactctggac atggtactgt tgtgactgct ttgctactca ctgactcaaa aggttgtgtt 2760
tatcttcctg ttcctttgtc ctacttagtg cccacctgac attattaggt atttggatat 2820
aagtgtttaa ctgttcgtag atatggcctc ttttttcctt ctctttatta atttgtatac 2880
gtatttgcca atttggattg tctaacttag ctgtaccttg agttattcat caactgtaat 2940
tatttatata gtaccttgca aaatgaggcg agtagtgaaa ttcttaagtt gtttaggaaa 3000
cagagaaaagg gggccgggca cgggtggctca tgcctgtaat cccagcactt tgggaggccg 3060
aggcaggcag atcatctgag gttaggagtt caagcctggc caacatggtg aaaccccagc 3120
tctactgaag gtacaaaaaa ttggcctggc atggtggggg tgattctagt cccggcaact 3180
tgggaggctg aagcaggaga atcgctttaa cctgggaggc agaggttgca gtgggcccag 3240
atcacgcat tgcactccag cctgcgcaac acagtgaac tccatctcaa aaaaaaaaag 3300
taaacagaga aagggatcat acctgtccta ttttttattt ttattctggt aagcacattt 3360
aatagactct tatttatgat tattttcttg tttctgcgta ttaaggatga accatttgaa 3420
aaccatggtt attgaaaatc tggagggaaa taaacacatc acccacg 3467

<210> 299

<211> 3184

<212> DNA

<213> Homo sapiens

<400> 299

```
atcctattct ctctttactt tgttgatagt gtcttttgaa gcacagactt aattttgatg    60
aagtcttata catcatgcca ttggtggatc atgtttttgg tgcattgtct aggaacctta    120
accccaggtc atgaggaatt tttctttttt ctttttttga ctcacattct cactctgtca    180
cccaggctgg ggtgcagtggt cacaatctcc actcactgca acctctgcct gctgggttca    240
agtgattctt gtgcttcagt ctcccaagta gctgggacta caggtgtgca ccaccactcc    300
cagccccattt tttttttatt tttttttttt agtagagttg ggatttcacc atataggcta    360
ggctgggtctt gaactgacct caacggatct gcccgcctca gcctctgaag tgctgggatt    420
acaggcatga gccaccgtgc ccggcctatg gatTTTTTtTc ttctaaaaat tttataaatt    480
tagttctaca tttagatccg tgatccattt taggttaatt tttgtataag ctgtgaaatt    540
taggtagggtt tttttttttg catatggatg ttcagttggt ttaaaatcgt ctgttgaaaa    600
actctccatt ccccatgag ttgtcttttc acctttgtca gaaatcaatt gctattttatg    660
tgagtctggt tttggacttt attccatcga tctatgtggt tatcctttca taaataccag    720
attgccttga ttatcacagc tttatagtaa gtgttaaaac tgggcagcat gattccttca    780
aaattttttt gaaatctttt tcaaaattgt tttggctaatt ttagtttctt tgccttccat    840
atgaatttta gaattagcta ctctgtatct acaaaaaatc ctactggggt tttgaatgca    900
atTTTgtgtc ttccaatcca tgaacatgag gtatctattt aggacctctt tcatttcagt    960
tatcagcatt ttatgtcatt tttcagcata tattccacag tgttcatttt ggaggaacta   1020
ttgttaagtt gtattatttt tgaacatgg gtttccaatt gcacatcgct agtatgtaca   1080
aatgtgtttg atTTTgtttt gttgaccttg tatcctgtga ccttgctaaa cttcattagt   1140
tttgggagtt atTTTgttgt taactcatta agttttctac ataaactacg aatagaaaca   1200
gttttatttt attcttttta gtctatgatt tttcttgcct gattttgttg ttaactcatt   1260
aagttttcta cataaactac gaataggaac agttttattt tattcttttt agtctatgat   1320
```

ttttcttgcc tgattgcagt ggccagaaca ataacatgga gaaagtggcc atctcagtct 1380
tgttctggat cttaggattt tgaaagcatt gtttttgacc attatgtatg caagctgtag 1440
gcttttctta aattcccttt gtcattgtga gcaagttccc atctattaat ttgttgtag 1500
cagagtttca tgagtggatg ctgaattttc tatgctcttt ctgtatcagt ttggtcattc 1560
tttttgttta gactgttaaa atcatggatt ttactgattc cagaattttg aaacagctta 1620
tatttcctcc caaccccaaa cttggtcatg gtacattatt cagcttatgt atctagattt 1680
ttattttttg aggattttta tgtctgtgtt cattttggat attgtgcaat tgtttttggt 1740
tgttttttcc ttgtgttatc tttatcttgg tatggatatca tgtaattct ggtcttgtaa 1800
aatgaattgc aaagtgatta ttctttctgg aagagatttg tagaatttgt tatactttta 1860
aatgttttat gaatttgcta gtaaggtttt aaacaatggg tcaattttta aaaatagaga 1920
atttattgag gtttatttaa gtttgggtac tgtatgcctt tcaaggaatt ggttcattct 1980
atcctatgtg catagagttg ttcattggtat tttctttgtg tcgttctaag gaggatctat 2040
actgttatct tttctttgat tcctaagatt ggaatcaaag attggaattc cttctctttt 2100
tttgtaatt ttgccagagg tttatcaatt ttactgctct tttcaaaaat tagttttttg 2160
attgttttct attaatgtgt ttacaattgc atttattttc tgcctctttt ttttttttc 2220
ttctttctgc ttgctttagg tttagtttgg gcttcttttt tttgtagaca ggtctcactt 2280
catcaccag actggagtag tgttatgac atgcttcact gcagcctcaa actcctgggc 2340
tcagacagtc tccccacctc aggctcctca gtacctggga ctacagatgt atatcactat 2400
gcctagctaa tttttgattt tttgtagaga tagggctctcc ctatgttgag taggctggtc 2460
ttgaactctt ggcctcaagc aatcctccca ccttggcttc ccaaagcatt ggaattacag 2520
gaatgaatga gtctctgtac ctggctctct catgtatttt taagatctga taataagtgc 2580
ttacactttt agcactgtct tgggtgaattt tatcattata taatgtccct aattatcctt 2640
ggcaattttg gttgttctta actctacttt gatgaatata aaaatggctt tttaatattt 2700
tttttgagac aagagcctca ctctgttgcc cagggttgag agcagtgggtg tgatcttgtc 2760
tactgcctc acaggttcaa gcaattctcc tgccctcagtc tctggagtaa ctgggtactac 2820
aggcatgcgc caccacacc agctgatttt tgtattttta gtagagatgg ggtttcacca 2880
tgttggccat gctggctctg aactcctggc ctcaagtgat ccgtccacct tggcctccca 2940
aagtgcctggg attacaggtg tgagccactg cgctcggcct taaaaattgg cttatctttt 3000
aattcatctt gactcatgtt tactgttttt tggtttctga aaaatagatt taataaataa 3060

taacatttta tcaaagttat tagtatagag aaataaattg agtgttgta ttattctatg 3120
atcatgatga cagcacagaa gttaatgtgg ccagcatata gttttgatta aaaattatac 3180
aagc 3184

<210> 300

<211> 3076

<212> DNA

<213> Homo sapiens

<400> 300

gcgcgcgccc cccgcctgcc tgcaggtgct gcgcgatgcc tggcggcgcc gggccctgcg 60
gccgccgcgc ggcttccgca tcagggcggg gggatgatgc tttccagtgc aaatgaatcc 120
aataactcaa tctcagttcg tacctttggg tgaagttctt tgctgtgcta tatctgatat 180
gaatacagct cagattgtag taacgcagga atcacttttg gagcgtttga tgaaacatta 240
cccaggcatt gcaattccat cggaagatat tctttatacc actctgggaa cgctgattaa 300
agaaaggaag atttatcaca ctggagaagg atacttcata gttactcctc agacttactt 360
cattacaaat acaaccaccc agggaaaataa gagaatgctg ccatcagatg aaagtcgcct 420
gatgccagct tccatgacat atctggtgag catggagagc tgtgcagagt cagcccaaga 480
gaatgctgcc cccatatccc actgtcagtc ttgccagtgt ttccgggaca tgcacactca 540
ggatgttcag gaagcaccag ttgctgcaga agtgactagg aagagtcaca gaggtcttgg 600
ggaatccgta tcttgggtac agaatggggc agtttcagtg tctgcggagc accacatttg 660
tgagagcacc aaacctttac catacacaag agataaagaa aaaggcaaga agtttggttt 720
tagtctctta tggcgcagct tatctagaaa ggagaagccc aaaacagaac acagcagttt 780
ctctgctcag ttccacactg aagaatggcc cgtccgagat gaagatgact tggacaatat 840
ccctcgagat gttgaacatg agataatcaa acgaattaac cccattttga ctgttgacaa 900
tttaatcaaa cacactgtcc taatgcaaaa atacgaagaa cagaaaaaat ataatagcca 960
gggcacttcc actgacatgc tgacaatcgg gcataagtat ccttcaaaag aggggggttaa 1020
gaaaaggcag ggtctgtctg caaaacctca agggcagggc cattctcgaa gggatagaca 1080

caaagccagg aatcagggaa gtgagtttca gccaggaagc attagactgg agaaacaccc 1140
caagctccct gctacacagc ccatccccag aattaaaagc ccaaataaaa tggtaggtca 1200
gaaaccactt ggtgagatta caacagtgtt aggttcccat ttgatttaca aaaagcgaat 1260
cagtaatcct ttccagggtt tgtctcaccg aggaagcaca atatccaaag ggcacaaaat 1320
tcagaagacg agtgatctga aaccagacca gactggacca aaggaaaagc ctttccaaaa 1380
gcctaggtcc ttggattcct caagaatcct tgatggtaaa gccaaagagc catatgctga 1440
acaacctaat gataaaatgg aagcagaatc catttacata aatgacccta ctgtcaaacc 1500
catcaatgat gacttcagag gtcacctctt cagtcaccct caacagagca tgttgcaaaa 1560
tgatggtaaa tgctgtccct ttatggaaag catgttgaga tatgacgtgt atgggtggaga 1620
aaatgaggta attcctgaag tcttgaggaa aagtcattcc cactttgaca aattagggga 1680
gaccaaacag actccgcata gtctgccatc acgaggtgcc tccttttcag accgaacacc 1740
ctctgcttgt agattagtgg ataacacaat acaccagttt caaatcttg gccttttgga 1800
ttaccagttt ggcgtgaacc ctttaagaca agctgcaaga caagacaaag actcagaaga 1860
attattgaga aaaggatttg tccaggatgc agagactaca agcctagaaa atgaacagct 1920
ttctaataat gaccaggcct tgtatcagaa tgaagtggaa gatgatgatg gtgcctgtag 1980
ttcattatat ctagaggagg atgacatttc tgagaatgac gacttacgtc aaatgctgcc 2040
tggccacagt cagtattcct tcacaggtgg aagccaggga aatcatttag gaaaacaaaa 2100
agtgattgag agatctctga ccgagtacaa cagcacaatg gagagggttg agtctcaggt 2160
gcttaaaaga aatgaatgct acaaaccac tgggctgcat gctaccccag gtgaaagcca 2220
agaacctaac ctctctgctg aaagttgttg cctaaattca ggggccaggt ttggttttta 2280
ctacgaagaa gaaccagtg ttgctaaatg tgtacaggcc tcagcacctg ctgatgaaag 2340
aatctttgat tactatagcg caagaaaagc cagttttgaa gctgaagtca tacaagacac 2400
tattggtgac acaggaaaga agccagctag ctggagtcag agtcctcaga atcaggaaat 2460
gagaaaacat ttcccacaaa agttccaact tttcaacact tcacatatgc cagtgttggc 2520
tcaggatgtc caatatgaac acagtcactt ggaagggaca gaaaatcaca gcatggcagg 2580
agatagtgga atagattctc cacggacaca gagtctggga tctaataatt cagtcatttt 2640
ggatggacta aaaagaagac agaattttct gcaaaatgtc gaaggcaca agagcagtc 2700
accactcaca tctaattcct tactaccgct aactccagtc ataaacgttt aattttcttt 2760
tggaaccta ctttttctt tataaaaagg tagagcatta ttacagaatc tttcaatcat 2820

gtaagaattg agtatataag aattgtctaa aggcaagcat atctatacta ttaaccacat 2880
tacacatttt gttctaatta ctggcttttt tttcctcttt tgggtgtctta aggctttttg 2940
aagcctattt tactgtgagt ttattgggag tatatagatt attttcgatt aaaaagtgga 3000
attattggtc cccttccaat tgtaattatc ttgaattttt atacattagt ttctcaaata 3060
tatagaatgc caattt 3076

<210> 301

<211> 4225

<212> DNA

<213> Homo sapiens

<400> 301

aaacgagcag gtcgatgcct gaggatttaa tggagaaatc ccaaagtgag ccggggcgcg 60
cgggtggagga ggggcgcgcc gcagccgggg cgcctgggcc ctgatgggcg ggagcggggt 120
ggagcggcct cgcctgccag gcagccctgg gcgcggggct cggcggccac actctggaga 180
cagccacggt ccaggcaggt gggggagggc gctgctcccg tcctgatgtg ccaggagccg 240
ccagcagcca tccaggtgac taagccggcc cactagcact gagtcaccgc ccgcctcgag 300
ctgttcttgc ttctcctttg catctgatta ttttgggagc tggaaacttg gagctgcacc 360
tgagtcccg cctttctagc tctcccctcc ctaccttggg ctccaggaag atgggacttg 420
ctgtgagtct gctgccacc cctaaagata tggaagacgc tgtggggggc agaagtgcc 480
ggggggctgt ggcagcaggc agagtgcaat agcagatatg gtggtcaggc tgcccgtgtg 540
tgtcctctgg aggtgttggg acagaagggc agtcttgtcc gagctgactg gagtcctccc 600
gggctggctc tgaactcatc tcccacgggg atgtttcggg aaaggagtgg cttctggggt 660
cggagtggca tttggagagc gaggctggat tggcttaggc tggcctgggc agggagtgcc 720
gcttcctggg ctagagacaa gcaccagcct gcagtggaga acgcaggacc ccgctgcccc 780
gaaggagcag ccacggcctg cggaggactg gcccagcaag gtcccaggtc ttccctctcc 840
tcagcgccta agagagaggc ccagtgcggg tgaggagtcg cgaggaagag gcggaaggcg 900
ccggaaggca ccatgttccg caagaaaaag aagaaacgcc ctgagatctc agcggccacag 960

aacttccagc accgtgtcca cacctccttc gaccccaaag aaggcaagtt tgtgggcctc 1020
ccccacaaat ggacagaacat cctggacaca ctgcggcgcc ccaagcccgt ggtggaccct 1080
tcgcgaatcg cacgggtgca gctccagccc atgaagacag tggcgcgggg cagcgcgatg 1140
cctgtggatg gctacatctc ggggctgctc aacgacatcc agaagttgtc agtcatcagc 1200
tccaacaccc tgcgtggccg cagccccacc agccggcggc gggcacagtc cctggggctg 1260
ctgggggatg agcactgggc caccgaccca gacatgtacc tccagagccc ccagtctgag 1320
cgcaactgacc ccacaggcct ctacctcagc tgcaacgggg gcacaccagc aggccacaag 1380
cagatgccgt ggcccgagcc acagagccca cgggtcctgc ccaatgggct ggctgcaaag 1440
gcacagtcct tgggccccgc cgagtttcag ggtgcctcgc agcgtgtct gcagctgggt 1500
gcctgcctgc agagctcccc accaggagcc tcgccccca cgggcaccaa taggcatgga 1560
atgaaggctg ccaagcatgg ctctgaggag gcccgccac agtcctgcct ggtgggctca 1620
gccacaggca ggccaggtgg ggaaggcagc cctagcccta agaccggga gagcagcctg 1680
aagcgcaggc tattccgaag catgttctg tccactgctg ccacagcccc tccaagcagc 1740
agcaagccag gccctccacc acagagcaag cccaactcct ctttccgacc gccgcagaaa 1800
gacaaccccc caagcctggg ggccaaggcc cagtccttgc cctcggacca gccggtgggg 1860
accttcagcc ctctgaccac ttcgataacc agcagcccc agaagtcct ccgcacagcc 1920
ccggccacag gccagcttcc aggccggtct tcccagcgg gatcccccg cacctggcac 1980
gcccagatca gcaccagcaa cctgtacctg ccccaggacc ccacggttgc caagggtgcc 2040
ctggctgggt agggcacagg tgttgtgaca catgagcagt tcaaggctgc gctcaggatg 2100
gtggtggacc agggtgacct ccggctgctg ctggacagct acgtgaagat tggcgagggc 2160
tccaccggca tcgtctgctt ggcccgggag aagcactcgg gccgccaggt ggccgtcaag 2220
atgatggacc tcaggaagca gcagcgcagg gagctgctct tcaacgaggt ggtgatcatg 2280
cgggactacc agcacttcaa cgtggtggag atgtacaaga gctacctggt gggcgaggag 2340
ctgtgggtgc tcatggagtt cctgcaggga ggagccctca cagacatcgt ctccaagtc 2400
aggctgaatg aggagcagat tgccactgtg tgtgaggctg tgctgcaggc cctggcctac 2460
ctgcatgctc aggggtgtcat ccaccgggac atcaagagt actccatcct gctgaccctc 2520
gatggcaggg tgaagctctc ggacttcgga ttctgtgctc agatcagcaa agacgtccct 2580
aagaggaagt ccctggtggg aacccctac tggatggctc ctgaagtgat ctccaggtct 2640
ttgtatgcca ctgaggtctc cccagtgtg cgagacttcc tggagcggat gctggtgcgg 2700

gacccccaag agagagccac agcccaggag ctcttagacc accccttcct gctgcagaca 2760
gggctacctg agtgcctggg gccctgac cagctctacc gaaagcagac ctccacctgc 2820
tgagcccacc ccaagtatgc ctgccaccta cgcccacagg cagggcacac tgggcagcca 2880
gcctgccggc aggacttgcc tgcctcctcc tctcagtatt ctctccaaag attgaaatgt 2940
gaagccccag ccccacctc tgcccttcag cctactgggc caggccggac ctgccccctc 3000
agtgtctctc cctcccagat cccagatgg agacccttt ctacaggatg accccttgat 3060
atttgcacag ggatatttct aagaaacgca gaggccagcg ttcctggcct ctgcagccaa 3120
cacagtagaa aaggctgctg tggtttttta aaggcagttg tccactagtg tcctaggcca 3180
ctgcagaggg cagactgctg gtctccacag atacctgctg ttctcagctc cagcttcaaa 3240
cctcgagtct cgagagggcc acgggggtgg ttttatgacc ggaatcccgc ttctcctc 3300
acgtctgatg tcctgaaggt gcagtccac ctgtacagcc cctccccgcc cagaactgtg 3360
aatggcctgc tccaggccat ggctgggggc agggagttag gggacaattt ctgagtgaaa 3420
gagaaagaat ggggtcgggt gtgaaggtgc tctcacttta cagaatggag agaacatcgt 3480
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtaa ggggaggaaa 3540
gccaccttga cagcccaggt ccctccaggt caccacagc cagtttcagg aaggctgccc 3600
ctctctccca ctaagttctg gcctgaaggg acctgcttct ttggcctggc ttccacctct 3660
ccactcctgt gtctacctgg ccagtggagt ggtccatgct aagtctaaca ctctgggag 3720
ctcaggaggc ttctgagctt ctctgtact gtgcatcgtg agggccagag acaggaatgt 3780
aaggattggc aactgtgtta ctttcaagt ttatctcaat aaccaggtea tcagggaccc 3840
attgttctct tcagaaccct atctgggaga gaaggcgaac cacctccggg tttccatcat 3900
gtcaaggtca caggcatcca tgtgtgcaaa ccatctgccc cagctgcctc cacagactgc 3960
tgtctccttg tcctcctcgg ccctgcccc cttcagggtc gctgtgagat ggaattccag 4020
gaaagaactt caggtgtctg gaccctttct atctagataa tatttttaga ttcttctgct 4080
ccctagtac ctacctgggg gcaaagaaat tgcaaggact tttttttaag ggctcagagt 4140
ttcaaaacaa aagcatcttc cctagaaatt tttgtgaatt gtttgcactt gtgcctgttt 4200
taaattaaat tgagtgttca aagcc 4225

<211> 3877

<212> DNA

<213> Homo sapiens

<400> 302

agctgtaacc	aggaggcagg	gaagaaggca	atgcagtcct	cattctttag	agactcaacc	60
tgtgtcccca	gccctcccca	cctcctccca	cacccccctc	caaactcagc	ttggctggga	120
aaggaaactc	cccagttctg	tgtgtctctg	caagctgagt	gtttgcaggg	cagctgttgg	180
tgtacgtgtt	ttgtttctga	tgctgagacc	cttcctgaac	cggatctcca	tcccttact	240
gagcaggggt	cacacatatt	tatgttggag	tgcaaaggct	tccgatgccc	ggacacgtgt	300
cctccaatct	gagaagggaa	ccagggaagg	ggctggagtt	gatgcatctt	gacttaaggg	360
ctgaagagtt	ggcaattttg	gaggccagt	aagagccacg	tagaaaatgt	cccgtgcct	420
gccatcatca	gcagtcctc	ttgctcccat	cctgcagaga	gggctccac	acagagagca	480
gacacaggga	cctctttaaa	atgaagatga	aatgcacctg	gttctaccac	ctagttagaa	540
gcagttatga	aggttgaaga	gctgttatct	gagatttata	gccccaaatc	tatgagatag	600
actctcctaa	ttaataagac	aaggatgact	agaaaagttgt	gaaaactacc	tggcagggct	660
tggagcctgc	tgtcaccacc	acgatgatag	cactgtcttt	gctgctgagc	ctattagaat	720
gtcaggatgt	gcattcttct	ctcctagtgg	gatggcacgg	ttcacctggc	tattacagag	780
aagcaagtgc	agatcgtgac	ttaaggctcc	gggaggagag	ttaatcaggg	aagagctggt	840
tgacaagact	cactcagtgc	atgacttgag	agcaccaaga	gggggaaagg	gagaagaaag	900
aacctcttcc	aaaggcagca	tccacccctt	tgacaaaagg	ccatttcccc	cagcccgggg	960
tgctttctga	cttcctttgt	tccccgatga	gcattttctt	ccttgctccc	agccttcaca	1020
taagttcaat	tcaacatcct	ctctctcttc	tcccaatgtc	ctctccttaa	ttttgctgca	1080
tcctccagt	tgaatgtttg	cctcctggtc	tgggatctgt	cttattccct	ttatctcacc	1140
tgaaaaaact	ctccccttta	atctctgctc	attcaagtcc	tgcccatcct	tcaaagtatg	1200
gccaaagtca	cctcttccag	aaagccccac	cctgtggtgt	tatctccatc	ctgaatcaca	1260
gcagcactta	ctgtgagata	actatcaggt	tacatctatc	agagttcaat	gcactctccc	1320
caaatgaagt	ggacacttgt	tggcagtaag	aagagaagct	ttttgcacca	agtgggtgcat	1380
tcaatgcaat	gcaaggagac	tgtgacgata	ctgaaatgag	tattaccggg	ccccaggaga	1440

tgaacaccgt ccttgcttga tgccagttca taaagagagc tcttgtttat tgagagctta 1500
tgagtgctga ggaattcaca taaatcatct catctaaatt ttccaacaat catgagatgg 1560
tttctcttat ttctctcttt tacgcatgaa gaaactgggg ctcaggaggt tagatgactt 1620
tctcagagtc acacagatag tacagggtctg acccagaatt caagcccagg tctggcagat 1680
tccagcaccc gccctttgcc tccacgacca agtacaagca gcaggctggc actggccttt 1740
ccctgctatg actgccgagc tgggttacac ctgctgctgg tccccagcac caggcacacg 1800
acgtaactgt gagtcctccg agtatgtgag ggagctggca ctcaccttct gcctgaagca 1860
aaggagctgt gctcttccgt ttcagtgtga aaaagcttca gaagatgccc agcttagaag 1920
gacacaagag acagtctgtg gacaacatct ccacttcctg gcgtcctcag cactgttgct 1980
agtgaagcta ctctgccaa ggtctccaga gagcttctga aagaagtcag gactcatgca 2040
tgcagatgaa tacgcctcgt ggggtattcac caggctcctt tgggaagcca gctctgtgtc 2100
ccaggcacac cgtctgtgtg caagagaagg ggagcacctg agtttgggaa ctgctttcgt 2160
accagcttat aggccacccc aagaaccggc ctctggctt cctagtcaca gaccgcctgc 2220
agggttgact tatgcatcct tttgcaggag acaggctcac ttctctcctg tgactaacat 2280
ggaattacgg gttaaggagg gaagttgtac tcacctgttg attcatttat tcaactcactt 2340
gctcactcat caatcatttc ttcaacaatg aaacccttac tagacaaata ctgactccct 2400
gctccagaat aactatctgt tcgggtgctag gactgtcaaa tgagtaagcg tttcttccca 2460
caggcgttca ggggtctattt ctgcacttta cagacaggca agacagaagt gatcagaagc 2520
ggccaccaac catggagttc agaaacacgg cacagtctg gaagaggcga aaggcggctc 2580
ttccatccat gctgggtcaag aggaaattca acacacctca cagccattga atctgaccag 2640
gcgtgtaata catcccatcg tcttgtcagt tagcagctgt gggaccttga aggctttctta 2700
aattcccaa gtctagactt tcttatcttt aaaatgcagc tgaaaacaat gcctgtctca 2760
tggaggtgta agggttaaat ggaatcatgt agcaagcatt cagcacatgt caagtccagg 2820
tcaaggcaa catgcagggg caggagagg tgtaacctt ttcagtttg agccatgcag 2880
gacactgcca tttgcagccc tttggggtaa gactgtagcc ccaaacatc ctgctgcccc 2940
agagcagtgg ccagcaggt gcactgagag ctctgggtgca cctggcatgc ccgactcct 3000
cacacagcag caacaggac agtgacaggg acctgagatg ggggtggcca cctggctggc 3060
agctggcact gggcacattg ccagaagtt ggggagttct caggtagggg cagaggtggg 3120
tgtttgaggg agcagttagc agcactgtct gctgtggcag gggctctcctg ggtaaggtca 3180

gagggattcg agggaggccca gggatcaccc cagggtgggg tgggacgctg ctcaagtcac 3240
 aaagcaaagt tgcagggtgt aggggagggg atgggactgt tagtctaatt gtgactcatc 3300
 tctccttatt tttctcctta tctcttgtat ttatTTTTTt caatcctccc aagttactgg 3360
 gccttgagga cactcctagt gtgtgtgtgt gtgtgtgtgt gtgtatgtgt gtgtgtgtgt 3420
 gtatttctat atatataatt tttctTTTTt ttgagacaga gtttcgctct tgttgctcag 3480
 gtggaagtgc aatggtgcga tctcaactca ctgcggcctg catctcctgg gatcgcttga 3540
 gcccaggagg tgcaggctgc agtgagccat gatcatattt gccagcctgg gtgacagagc 3600
 aagaccatct caaagaacgt atttaccgaa tgaagtttta tgatgttctc tagcactttt 3660
 tagtttattg tctttaaaaa gaaaccctct gaagtgtctc tggagaatac aaacgcatgc 3720
 gcgcatgcac acgctgggaa caggagctgc ttcagtaggt aactgagtgg gagggaggtt 3780
 agcttttcac tgtgaccctt atctgtacac ctgctaactc aaaataattt aataacaaca 3840
 acaatgacaa taaaaaggga gtgagtgtct tcattttt 3877

<210> 303

<211> 3557

<212> DNA

<213> Homo sapiens

<400> 303

agtgcctact gcgctctgcc tgccggtggt gtctggattt ctataggaat cccaggaggg 60
 tcttactgga gggttgagag ccacctgatt gaaggcgttt gcagtcagag taaagacggc 120
 tgccgcagca tgaaccctg agctgatgag tcttattata gcccggtggt cggaagacag 180
 agtgctgcta ttcacctctg cgtgggcgtc ggtgggtgcag ggggaagcag caggccatcc 240
 agcggctcac accctacgcg gctgcagctg ccaagggcct ggccctgcc tccctcgggc 300
 catggtgagc tgtggcgggg ctagaggaac cgggaccag gactgatagg cggcgcaccc 360
 aggggctcct ctctccccag agcgacaggg cccggagagc cgtgggcctc accatgctgg 420
 cgccgggcag cagccctggg cagaggggca ggctcgccct gcagtggagg caagtctcct 480
 ggatcacctg ctggatcgcc ctgtatgctg tggaggccct cccacctgc cttttctcct 540

gcaagtgtga cagccgcagc ctggaggtgg actgcagtgg ccttggcctc accacggtgc 600
ccccagacgt gcccgcagcc acccgaaccc tcttgtctctt gaacaataag ctgagtgtccc 660
tgccaagctg ggctttcgcc aacctctcca gcctgcagcg gttggacctg tccaacaact 720
tcctggaccg gctgccccgc tccattttcg gggacctgac gaatctgact gagcttcagc 780
tgcgcaataa cagcatcagg accctggaca gggacctgct gcggcactcg ccgctgtctc 840
gccacctgga cctgtccatc aacggcctgg ccagttgcc ccctggctctt ttcgacgggc 900
tcctggctct gcgctccctc tcgcttcgct ccaaccgtct gcagaatctg gaccggctga 960
catttgaacc cctagcaaac ctgcagctgc tgcaggtcgg ggataacccc tgggagtgtg 1020
actgtaacct gcgtgagttc aaacactgga tggagtgggt ctcctaccga gggggacgt 1080
tggaccagct tgcctgcacc ctgcccgaagg agctgagggg gaaggacatg cggtatgttc 1140
ccatggagat gttcaactac tgctcccagc tggaggacga gaatagctca gctgggctgg 1200
atattcctgg gccaccctgc accaaggcca gtccagagcc tgctaagccc aagcccgggg 1260
ctgagccgga gccggagccc agcacagcct gcccacagaa gcagaggcac cggccggcga 1320
gcgtgaggcg agccatgggc acggtgatca ttgcaggggt cgtgtgcggc gtcgtctgca 1380
tcatgatggt ggtggccgct gcctatggct gcatctacgc ctccctcatg gccaagtacc 1440
accgggagct caaaaagcgc cagcccctga tgggggaccc cgagggcgag cacgaggacc 1500
agaagcagat ctcttctgtg gcctgagcgc ccatccccac ccggccaggt aggaaggcg 1560
gggagagcac acggcattgc tcagccacag ctcccacctt gacccggcgc tggccactgc 1620
ctccccgagt ccaccctcct ccccgccctc cagcagacaa gccacaccgg gttctctccc 1680
tgcactttcg aggctccctg aaagccaccg tgctgggggc tcctgctgat gtcctgtct 1740
gggccagtaa atctttggaa catgtggggg atctccctaa gctctggcca cagcaaagca 1800
aggaggtgtg tgcaagagga ggcttccgga ctgggcattc ccctgtcgcc cttcctgccc 1860
tggggtggcc atagctggtg actcttccta ccttgcctgg cccacctcac ctgcattgag 1920
gggacgggga gggagggatc tgagggatga aggtagattt ctgagactct ctccctaagcc 1980
agaaagacgt tcttaacacc cctgcagtgt gaaagctggc ccagctctac aactgttggc 2040
accaatgtgc aaacacacca gccctgccat ctggaccag cactcagaaa caccatacac 2100
ccctggccga cgccatcatg cccctggatc tgctataggc cacactgacc acatgtctct 2160
ggattcgcta attcactcac acaccattg catcaccagt gcggtcacat ggattgaaag 2220
aattaataca cacacacaca cacacacact cacacggtca cacggagacc gaggctatga 2280

gcgctcgaac agcagagaca tgctcttccc caggggtctc cctgagacca cagagcctct 2340
cgcggtgctca ctgcaatctt ctcaagtcaa cagcaggaag gaactcaacc agtaacacca 2400
ggatcctttg agatcctcta aagtgggcca aagtgggtgcc cctggaggag ccctcctgtc 2460
accatggtaa ccctctcaca cctctcctgc tgggctttcc cgggatacca cccaggggcc 2520
tggagcggct gcatgtgtgc atggcggcct cctgaggacc cagccacaca ccaactggtgt 2580
tgcctcggtc ctgcccacgc atctcacagc accaggccct gtggggcccc cactgattcc 2640
tccacagcct gcagcctggc accgtgactc tgtgcctctc gccctccatc ttcagtactc 2700
ctggcctgtg acttcagggc tgggacttgg tgggtgctttg ccattggtgg caccctctgg 2760
ggaaagcagg tggcaggcag agaacacggt ggctcccctg aggctcattg cctgccagct 2820
tattgcagac agagcccagg agcaggagcg ggtggccacg tgctgcccag aggctcccag 2880
gatggggcct ctgttcccgg gctttgtctg ctcagtgtgg ctccctagag caccagccg 2940
gggccaaacc agagagtggg tggggagcct gtctgggaca gagccacctg ctgccaaggc 3000
agtgcaagtt ttccaggta cctgtccccc tccctagctc tgcccctcct cagagtgtga 3060
agatgggtggg tacctaggtg tcatgctcac aggctcagga ggcatcaggc tcgtccctgg 3120
ctctgggatg gaatctcaat gggggctcag gaagaggcca gcaagaacc tgaagccaag 3180
ggtctgagca gagggagtgt gcaggcctag ctctgtgcc ccactccgac cctccctgct 3240
catgcggcag tgggtgggtg aggtgggctg ggggcctgga ggagtgcctt tgaggaggtc 3300
agtcctggca ggtggacaga ggacgcctgg catgggctgc ttactgggac cccaggcggc 3360
cctggccatg gccacagtct tccttctttt ggcggtgtggg ctggtaccag atctggggat 3420
tttctaaagg gactgggggg aggggagggc attgtcaatg gtggtatctt tagcctgaga 3480
cagaagattt ttaaaggcaa aattatatat ctggtttgtt gtttcagaag accaataaag 3540
actgtatttt cctatgt 3557

<210> 304

<211> 4024

<212> DNA

<213> Homo sapiens

<400> 304

ttggaagtgg ggcctttggg aggtgattgg gtcatagggg tgcagccctc atggatggat 60
gaatgccctt ctaagcccag gccagagggc tagcttgctg tttctcctcc aggtgaggat 120
acaactggaa gccagcagtc tacaggctgg aagaaggccc tcaccagaac ccaacccttg 180
gacttcagcc tccagaactg tgagaaatac atacctgctg tttgtcagac accagtctat 240
ggaattctgt tacagtagcc tgaactcaga catagccctt ttccatttat aagggtggtt 300
taccttatat tttatgtaaa aggtccattt tatttatatt tgaattgttg atttttttta 360
agagacgcgt gtttgctatg ttgcccaggc tggactccaa ctcttggaac tattgatcct 420
cctgtctcca cctcccagat tgctggaact acaggctaac agctctgttt taaagatgag 480
aaaatgggcc ccacgcagtg gctcacacct gtggtcccag cacttaggga ggctgagcca 540
gggtggagcca cttgagggtca ggtgttcgag attagcctgg ccaacatggc aaaaccccg 600
ctctactaaa aatacaaaaa aaattagccg ggcatgatgg cgcgtgcctg taatcccagc 660
tacttgggag tctgaggcag gagaattgct tgagcccggg aggcagaggt tgcagtgagc 720
cgagactatg ccactgcact ccagcctagg tgacagagag agactctacc tcaaaaaata 780
aaaataatta aaaaataaag atgagaaaat ggaggctgag gaggggtaaa agcgctaact 840
tgacatggag ttgaggacta gcactcatgt cacctcactc caaatgccag gcttttccca 900
ctacaccagc agcagttcct cctggggaaa caggctaggt tagaaagcga gtgagggaag 960
ggacagggag gggaagccct ctagtaggga gatggaggat aggggggtcat gttttgtggg 1020
gagagacact gaaagggtg ccacttggac tgaatgacct cccacctcca gcattaggac 1080
tccttccaat tcctagggggg ttcggaggca acaatattta tttagggtt gggagcgaga 1140
gtgctattcc aaccttcttt ggtatttgta atttcttttc cttattcttt aataaaagta 1200
gagtccaagc aaagtccaaa ccaacatata acctgtctc ctttactcta gattcattca 1260
gcttttccag accaggcatc accgagcgga gagaggggaa acaccctggc ttctctttgg 1320
cacatcagcc cctagttctt gagagagaag ggcagggtgg tctactcacc atgtctgtat 1380
cctgccgttc ttcatttgac tcactctgga tttctaactc ttcttctcg tcctcttcca 1440
taaggctgag tctgatgtag gggcaaagag actggctttt caaactgttc tttgaggacc 1500
cctgagagtt tctcggacac ccgggggtggg ggaagtgggg agcagtaagt acagcatagt 1560
agtttcccga ttgtgctgac aggaagtgtc ctgtggctaa aacaagtcca aaaagcacc 1620
acagagaggc aatgggtgag acaggaatcc cctcacagtg ggcgacagat ctgaagtga 1680

gacaggagat gatgagaaaa gctcaccgca tcagctgggt gcccaggcca ggacctgaag 1740
ggtttgtgtgg agtctggaaa tattgtggac ccaagaacct tgacctctcg gtgcctgcga 1800
cgggctgact gctgggaatg aagcaggatc aatgatggga taaaaatcaa gggtaagaag 1860
aggatgtaag gcagctgggt ttaatgggga gaaaagctca gagagatgca ttttaaagct 1920
aaacaatgga gaagggtttg agaagaaccc aacaatgtgg gagtgctaca gcagggaacc 1980
atgaaacaga aacagcaaga tggaggcagc cagacaccaa actgggaact cagacaccca 2040
gattccctcc atggcctcac ccctgggcaa aatccaactc tgagccatct tcttcctcca 2100
tctctttcaa ccccccacagg ggctgcctgc tcttcacagc tgtggagggt aggggtgggcg 2160
tgggcgggat gctgttcagc tgcagacttt cttcctggga cgaggagacg tcctctctgt 2220
taggcttggc aggccctgcc aagcagatgc atacattaac cacagcccag ggcctgcgac 2280
aggtgtgctc tctttccaag acctgcccag gatttagtaa gggaaagtca atcaggaaga 2340
gaatggaaaa cttatacagc ttcattctgt tgccctcaaa tgggcatagc cctatgtact 2400
aaatacatag ccctatgtac caaaaagtaa ggcttagaga attgtagcta ggccttgtcc 2460
aagaagaact tgctacacag cctagaaaac aagatggaaa gatataaaa tatacatttc 2520
acagataaac tgtaacaggt gaacaggtga acacaaacat gagggagggt tggagtctct 2580
aagattgaga ggtctgagtt agccaatgaa gacatctgag atcctatcca agatttctgt 2640
ggtcagaaaa agctgtaaat ggcaatagag ttttgggtacc agaggctaga gtggacaaat 2700
gagggccagg gaggaactgg aaaatgggag acaggatttt ctaaaagcta gaaaaaatg 2760
aagtgattgc aatgccagta taactgatat gatatgaagg gggacttatt tcctgcagag 2820
attggagaag gtagaggagg agaaagaatc caaagattct cactgcctga gaaaaccag 2880
gcaatactat tttaaagcat cagtcaaatt gacattaaca tctgttaact gtaaacagtc 2940
acactcccat tccccctt ctccactaaa aacaataatc ccaaagttag cgctcagcct 3000
atgggtttta gcagagggt acagaaaaca gggaagagac ataccctgg gcttggattc 3060
ccagagagga aaccttgggg cccagatgt gtcctcctga tctcctgag ctattaatgg 3120
tgtgatgcc gagggctggg cccttgagtc tctcctcttc tccatcttca ctggcttccc 3180
cagccactca cgttcatgtc cttaaataatc acctatactc tgccacatcc caaagggatc 3240
tcaagccttc agctctcccc tgaactccat cttaacagcc cccatggttt gttcaacatc 3300
tccactgta atcctgtggc caacaccaat gcccacact tccccacag ctatcttcac 3360
tctctgcctt ccccatctca gatactgtca actccgtcct tctgtcaggc caaaatcctt 3420

ggagccatcc tcaactgctc tttttgtctt acatcccaca tccagtttgt cagaaaagcc 3480
 tattagagat accttgaaaa tgcacccaga atctggccgt ttcttggcac ctccaccatt 3540
 gccccggcc taaaaagctc tcttatcttg catcttgggc tggactccta caacagccac 3600
 aacttccctg ctggtctccc agcttctagc cttcccccat ctctgtcgt tttcgacaca 3660
 gcagcctggg cgacagagcg agattccgtc tcaaaaaata aataaataaa taaataaata 3720
 aaataaaaaa caaataatga aacaggccag gcatggtggc tcacgcctat aatcccagca 3780
 gtttgggagg ccaagttggg cggatcaca ggatcaggaga tcaagaccat cctggcgatg 3840
 gtgaaaccct gtctttacta aaactataaa aattagctgg gcgtggcagc gcatgcctgt 3900
 agtcccagct acttgggagg ctgaggcagg agaactgctt gaaccccgagg aggcggaggt 3960
 tgcagtgagc cgagatagtg ccattgcatt ctacgctggc gacagagcta gaatctgtct 4020
 cagg 4024

<210> 305

<211> 3837

<212> DNA

<213> Homo sapiens

<400> 305

gcgttgggag aaatgcctag tgtgggtgac gggttgggtg gtgcagcgag ccaccatggc 60
 atgcgtatac ctatgtaaca aaactgcaca ttctgcacat atacctcaga acttaaagta 120
 caataataaa aaattttaaa aaccaccta ctcaggccac agcaatggcg gatgtccctc 180
 acccaaccaa gcttagcat cccaggtcaa cctcagactg ctgtcctagc agcgagaatt 240
 tcaagccagt ggattttcgc ttgctgggct ctgtgggagt gggaccact gatccagacc 300
 acttggctcc ctggcttcag cccctttcc aggagagtga acggttctgt cacactggca 360
 ttcttggtgc cactggggta ttgagaaaaa acaaaaaaca aaaactcctg cagctagctc 420
 agtgtctgcc caaacagccg ccctgttttg tgcttgaaac ccagaacat ggtggtatag 480
 acacctggtc ctggtctgcc agttgcaaag accgtgggaa aagcacagta tctgagccgg 540
 agtgcactgt tcctcccggt acactctctc acagctttcc ttggctgggg aaggagatc 600

ccccaacccc ttgcacttcc caggtgaggc gataaccac cctgcttcag cttgtcctcc 660
gtgggctaca cccactgtcc aaccagtccg aatgagatga accaggtccc tcagttggaa 720
acgcagaaat caccgcctt ctgcatggat ctctcttaca gctgcagacc ggagctattc 780
ctattcagcc atcttgacag tgaaaccaga gtctcattat tttaatggtt aaatattatt 840
ccatcctgtg tatataccac atattcctta ttcattaacc tattgatgga tacttaggtt 900
gattccatat gttgtctatt gcgaatagtg ctgcaataaa catgggagtg cagatatctc 960
ttcaatatgc tggtttcctt tcttttgggt atatacccaa caatgggatt gctagattat 1020
acagtagttt tattttcagt tttttgagga acctccatac tgttctccat agtagctgta 1080
ataattttca ttcccaccaa caatgtacaa aggtttcctt ttctctacat cctcaccagc 1140
atttattatt gcctgtcttt cggttaaagc cattttaact ggggtgagat gattcattat 1200
agtttttgc tacttttctc tggtaattac tgatgttgag catttttcca taacctgttt 1260
gccatttata agtcttttgt ggaatgtctg ttcagatctt ttgccattt ttttaattgga 1320
ttttttgcct tcttgctatt gagttatttg aacttcttat gtatcttgggt tattaatccc 1380
ttgtcagagg ggtagtttgc aaatattttc tccagtctg tgggctgtct ctttactttg 1440
attgtttcct ttgctgtgca gaagcttttt aacttgatgt gatcctattt gtccattttt 1500
gctttggttg cctgtgcttt tgaggctctg ctcaagaaat tgttgcccag atcaatgtcc 1560
tggagtgttt cccacattct ggagtgtttc tccaatgttt tcttctagga gttttgtagt 1620
ctaactctag atttaagtct ttaacctatt ttgatttgat tttcatatat agcgagagat 1680
agggtcttag tttcattctt ttgcattttc tcaggcgatt tattgaaaag actgtccttt 1740
ccccattgtg tagagaacca agtcttaaca ctctcttgag atgtccgttg ttgctatggg 1800
aatggtcatg gcagacttgg atgacatcct tcaagaagtt tgccacctct ccctctctca 1860
atgcacttcc cactgtgagc tggaaaaggc acaaaatgaa gagcaccagc ccagcttgta 1920
gactgaggag gtggaagtgg aggtggggca tgggtgggca gtagagactt cctggaggaa 1980
acggaggagt tgagctttga tacatggttg cagcttagcc tgtcatggga gcatggggaa 2040
gaatcccaag cggagagcac agcttgctta aagtgcagga accctgagtt aatgtaaag 2100
ggttcagaaa agtacaaggg atttgatgtg gctgcagcaa aagtcagga gctggggaag 2160
gatcagagat gaggctagaa aggcagcact gagccatgga ggccttcagt gctgcactga 2220
ggagcttgga ctttgcctt taggccaac atgcatttta gaaagatcac tactcctgcc 2280
tctggaggct ggaagggaga tccattaggg agctgacaca gttgtcccag tgagagaaag 2340

aagttggtgg cctgaaccag ggcaagtgtg atgggaaagg gataagggga cagtcacatg 2400
acacaagaga ggtagaattg ccaggacttg aggcttactt ggatgctgaa aggatagata 2460
aatgaaaatg tccatgtttc tcacacaaat acctgagaca gaaatacagg agtaggttct 2520
gggggaaaaa gtgagtttga ccatatactc aagtgccatt aagctacaag ggggtccaatt 2580
ataagaacct ccaccacca aagcaattct gcctgcttgg gaggccaaag tctagttgag 2640
cacaagtttg gtggttaactc agatgctcag acagtccagg ctgccacctc agactcacag 2700
ccagcaaccc aaagggtcca agccctgaaa agatttactt aaaaaattg ggggttttct 2760
atgtgctgct atagggtga tatgaggagc agaacatcaa ggggctttgg gtcataaact 2820
gagtatgaat ggctacaaac attctggaac ctcagtagca tgggggaaaa tcatgcatgt 2880
caggacttag ggggcccagt ggcctaagag acagtaacca ggaggctgac tttggttgaa 2940
accagtattg atgactccag aggtccaact gggggcatgg accctaggag caggaagccc 3000
caggcctctg gtgatgctca aatgcaggcc aatgatgggt cgtcccaaga aactaggctt 3060
ttcagagaaa ggaccagcc gatggctatg gggagcaaga cccagcccct ggggtaggag 3120
ctgtaggtgc aaacaggtgt accacagccc agctaggtag acagaactac ctaggggtgg 3180
ggaggcctct ctctagtga agaactaggg ctctgtgaag acagctgtgg cacatattca 3240
gtcttccaga ggagactaat atatgagtga taggggagcc tgcagtttca tgggaatgct 3300
gacctcctgg gatctggcca cacagataat gtcagccctc accagccact tggcctgagg 3360
ctcccgaatt tctgcatgtt gcctctatgc cctctaacc aactgtctgc cctggcccct 3420
aggaggagacc catccagaac cgcaagtcta agcgctgtct ggagctgcag gagaatagcg 3480
acctggagtt cggcttccag ctggtgttgc agaagtgtc gggccagcac tggagcatca 3540
ccaacgtcct gaggagcctg gcgtcctgac ccaccggggc cacttccggc tgctctttg 3600
ctactgtgta gcacctgtg caacattgcc tgctgtccac gtggggttgt ttggagtctg 3660
gggaaccagg ttagtgggcc cccaagaaga gctttttatt tcctattcaa tttcatgga 3720
gtttatagaa agatgctgat tggtaggtga tggtatgata tcaaactatt ttgcagttgt 3780
aatagggga cagatggaaa atatttataa ctgacaataa aatattatta agaaaag 3837

<210> 306

<211> 3962

<212> DNA

<213> Homo sapiens

<400> 306

```
agatgcatgg agggcctgga atcatgatga ggggagggga tgcggtgctc tctcgggcac    60
cggctgcact atcagcgttc cctggagaaa cagaaccctt aggatttata tagacatata    120
gaaagattta ctgtggggga ttggctcatg ccgttacgga gactgagaag acccatgagc    180
tgttgtctgt aagctggagg accagaaaag ccagtgacgt ggtttcagtc caagcctgaa    240
ggcctgaaac ccaggagaga caatgttgta agtcccagcc taagtcagag gcctgagaac    300
caggagcccg ctttccaagg gcaggggaag atggatgtct cagctcaaga agagagtga    360
ttctcccctc ctctacctt ttgctctatt caagccttca gtggatttga taacgcccac    420
ctgaatttgg caatctctgg ggcccctgga tccctgctga ggtgcccatt gtcccctcca    480
tccccacagg gcagcctgtg tagtgctggg tagggcccag gcctgtccca cggaagacat    540
ggcccctatc aggttccgca ctcagttgga gcttgtctcc aatgttctca ttttctcctg    600
caccaacatc gtgggtgtct gcaccacta tccggctgag gtctcccaga gacaggcttt    660
ccaggagacc cgagagtgca tccaggcgcg gctccactcg cagcgggaga accagcagca    720
ggaacggctc ctgctgtctg tccttccccg tcatgttgcc atggagatga aagcagacat    780
caacgccaag caggaggata tgatgttcca taagatttac atccagaaac atgacaacgt    840
gagcatcctg tttgctgaca tcgagggctt caccagcctg gcgtcccagt gcactgcaca    900
ggaactggtc atgacctca acgagctctt cgcccgttt gacaagctgg ccgcagagaa    960
tactgttta cgtattaaga tccttgggga ttgttattac tgcgtctcgg ggctgcctga   1020
agcaagggtc gaccacgcc actgctgtgt ggagatgggc atggacatga tcgaggccat   1080
ctcgttggtc cgggaggtga caggggtgaa cgtgaacatg cgtgtgggaa ttcacagcgg   1140
gcgagtacac tgcggtgtcc ttggtctcag gaagtggcag ttcgacgtct ggtctaacga   1200
tgtcacgcta gccaaccaca tggaggctgg cggcaaggca ggacgcatcc acatcaccaa   1260
ggctacactc aactacctga atggggacta cgaggtggag ccaggctgtg ggggcgagcg    1320
caacgcctac ctcaaggagc acagtatcga gaccttcctc atcctgcgct gcaccagaa    1380
gcggaaagaa gagaaggcca tgatcgccaa gatgaaccgc cagagaacca actccatcgg    1440
gcacaacca ccacactggg gggctgagcg ccccttctac aaccacctgg gtggcaacca    1500
```

ggtgtccaag gagatgaagc ggatgggctt tgaagacccc aaggacaaga acgcccagga 1560
gagtgcgaac cctgaggatg aagtggatga gtttctgggc cgtgccattg acgccaggag 1620
cattgatagg cttcggctctg agcacgtccg caagtctctc ctgaccttca gggagcctga 1680
cttagagaag aagtactcca agcaggtaga cgaccgattt ggtgcctatg tggcgtgtgc 1740
ctcgctcgtc ttctcttca tctgctttgt ccagatcacc atcgtgcccc actccatatt 1800
catgctcagc ttctacctga cctgttcctt gctgctgacc ttgggtgggtgt ttgtgtctgt 1860
gatctactcc tgcgtaaagc tcttcccctc cccactgcag accctctcca ggaagatcgt 1920
gcggtccaag atgaacagca ccctggttgg ggtgttcacc atcaccctgg tgttcctggc 1980
ggcttttgtc aacatgttca cgtgcaactc cagggaacctg ctgggctgct tggcacagga 2040
gcacaacatc agcgcgagcc aggtcaacgc gtgtcacgtg gcggagtcgg ccgtcaacta 2100
cagcctgggc gatgagcagg gcttctgtgg cagcccctgg cccaactgca acttccccga 2160
gtacttcacc tacagcgtgc tgctcagcct gctggcctgc tccgtgttcc tgcagatcag 2220
ctgcatcggg aagctgggtc tcatgctggc catcgagctc atctacgtgc tcatcgtgga 2280
ggtgccaggt gtcacgtctt tcgacaacgc cgacctgctg gtcaccgcca acgcataga 2340
cttcttcaac aacgggacct cccagtggag cctgtgtgag aacctcagac acaggagaat 2400
ggaagctggg acctactttc cctctggagt caaggaacaa agccctgagc atgcaaccaa 2460
ggtggcattg aaggtgggtga cgcccatcat catctcagtc tttgtgctgg ccctgtacct 2520
gcacgcccag caggtggagt ccaactgccc cctcgacttc ctctggaaac tgcaggccac 2580
agaggagaaa gaggagatgg aggagctgca ggccataaac cggcggctgc tgcacaacat 2640
cctgcccgaag gacgtggccg ctcaacttct ggcccgcgag cggcgcaatg atgagctcta 2700
ctatcagtcc tgtgagtgtg tggcggctcat gttcgctcc atcgccaact tctccgagtt 2760
ctacgttgag ctggaggcca acaacgaggg tgctcagtgct ctgcggtac tcaatgagat 2820
catcgctgac ttgatgaga tcatcagcga ggatcggttc cggcagctgg agaagatcaa 2880
gaccatcggc agcacctaca tggctgcctc cggcctcaac gactctacct acgacaaggt 2940
gggcaagacc cacatcaagg cactggccga ctttgccatg aagctgatgg accagatgaa 3000
gtacatcaat gagcactcct tcaacaactt ccagatgaag atcgggctca acatcggccc 3060
cgtgggtggc ggggtgatag gggcacgaaa gcctcagtac gacatctggg gcaataccgt 3120
gaacgtggcc agccgcatgg acagcaccgg tgtacccgac cgcattccagg tcaccacaga 3180
catgtaccag gtgctggctg ccaacacgta ccagctggag tgccggggcg tggtaaggt 3240

caagggcaaa ggcgagatga tgacctactt cctcaatgga gggccccgc tcagtttagca 3300
 gctgttggcc aatggtgcc aagcagcctgg cctccagagg catggaagca gcttctctgt 3360
 gtgccggggg tggcggggaa gccatgctcc agcccgagg gctgcgctgc tgagattttc 3420
 cacttggact ccagagcagc ttctgccttt gctggtgggc agcggcctct gtcccaggcc 3480
 ccggggtgcc agcgtcctgc gagcaccag ctgaccaaag acgtttccct ctgtagaaga 3540
 ctctgctaga ctgggtctga agcttgagtt ttctaacagg tgctgctgca caggtggaaa 3600
 ggagccgtgg gaatgtgtgt gtggcacggc ccagacaagg gcagggtga ggggcctccg 3660
 actcagctgg gggtagacgg gctcgaatgt ggctgggag agcctagggg gcccagggg 3720
 tctgcttttc tatgtgagcc tttaaacttc agacaggcca ccacctgca cctgcagggg 3780
 ctttggcaca ggagtgtgtg ctttggaggg actgtggcct tcctcgtggt cctctgcca 3840
 cacctccacg cacacagaca gtgccctagg agggaaacag aactaattac gagggggagg 3900
 caagaggacg ccaagcaagg agtggtgatt ctgagaaaaa tatttattaa ataaaacaaa 3960
 ac 3962

<210> 307

<211> 3925

<212> DNA

<213> Homo sapiens

<400> 307

aaaaccatca gatctcctga gaactcattc gctgtcatga gatcaacaag ggggaaccgt 60
 ccccatgac cagtcacctc ccaccaggtc tcttcctcaa cacctgagga ttacaattca 120
 agatgacatt tgggtgggga cacaaaacct aatcatatca gtgtgtcagt ttgtgaagga 180
 ggtatctctg catgtttctg gaacctgtct gtcactttgg aacattgttc taaacaacca 240
 gctcacaagt gagtttttag taccagcct gctttttctc gtacttgaca actccagaaa 300
 ttggtttgag agttgtgctt cttaaaccga tgggaagaca cagaggagac aaaggctgac 360
 tgtcgcccgc ttgcaacct tgccccccag gtcccagccc ccagccagct ggaacttggc 420
 ctggccactg gctggactca acatcaatcc tggagagctt gtccacacca ctagagccac 480

cgggccttac ccttgcctgg tctaccaa at gccgggagtc agcagctgct gacaaggccc 540
tcctcatgga gagggccgag cctggctgac agggaccttg ctctcctgca gatgggctat 600
gtgcgggagt atattctgtg ggcagcgtct aaatcccagc ttctggcaca ccagttcatc 660
tggaacatga agactaacat ttatctagat gaagaggggcc accagaaaga ccctgacatc 720
ggcgacctcc tggatcagtt ggtagaggag atcacaggct ccttgtccgg cccagcgaag 780
gacttttacc agcgggagtt tgattttctt aacaagatca ccaacgtgtc ggctatcatc 840
aagccctacc ctaaaggcga cgagagaaag aaggcttgtc tgtcggccct gtctgaagtg 900
aaggtgcagc cgggctgcta cctgcccagc aaccctgagg ccattgtgct ggacatcgac 960
tacaagtctg ggaccccgat gcagagtgtc gcaaaaagccc catatctggc caagttcaag 1020
gtgaagcgat gtggagttag tgaacttgaa aaagaaggtc tgcggtgccg ctcagactcc 1080
gaggatgagt gcagcacgca ggaggccgac ggccagaaga tctcctggca ggcagccatc 1140
ttcaaggtgg gagacgactg ccggcaggta agcagggtca ggcctcgagt aggcttgggg 1200
actgggcttg ctgctcccca aggtccagg cccgccagag tccaatctca tatgcagaaa 1260
tgtgaatctt ttccttctct tatatggttc aggtgccacg gggtaaatta gggcttctgc 1320
aaaaccaga ggcctctcct tccagccctt tcccactgt ccccgccatg ccagtgccca 1380
cctgagggaa ctgtccaggg gttgggtgcc ttatctcaca caccaccca gacagctcag 1440
cctcatgtct agcccagggc ctgggtgtcc cagcagcctg agtccagccc ccggtgtgca 1500
gaaaggaagg ccttccagac tcttgtctcg ctgtggtctc cccacctcac tccatctctg 1560
gggtgcttggc ttttgccctg catgagccag aagagctgct ggggtgcaag gacgccaact 1620
gaccgcatcc tgcgcctccc ggcttcccag gacatgctgg ccctgcagat catcgacctc 1680
ttcaagaaca tcttccagct ggtcggcctg gacctcttg tttttcccta ccgcgtgggtg 1740
gccactgccc ctgggtgcgg ggtgatcgag tgcattcccg actgcacctc ccgggaccag 1800
ctgggccgcc agacagactt cggcatgtac gactacttca cacgccagta cggggatgag 1860
tccactctgg ccttccagca ggcccgtac aacttcatcc gaagcatggc cgcctacagc 1920
ctcctgctgt tcctgctgca gatcaaggac agacacaacg gcaacattat gctggacaag 1980
aagggtcata tcatccacat cggtcagcca gccacagcgc caccctctc tcccttacc 2040
cctggcacc aggggtggat agggatcccc accccacaga gaggagaatg cccaggacca 2100
ccctgccagg agtgtcaggg tccagctctg aggtccgaac tgtcggccac caagctgttc 2160
tactgtagag ggtgcctggc cccggcccca gggagctagg gcgagagccg ccattgtctt 2220

gagtcagaag ctggagctgg gcggagtggg gctgggtccag gttcagtgcc ccagcttggc 2280
tccttcctcc acttcctccc ttctctttct ctgcctgctg cccaccacc caccatca 2340
ctgtctccaa gaaaacacaa cctgcctgtt gggggtggag ggggtgctcc tgttgagtc 2400
cttttccact cctcaaaaca gaccattgt ccttggccgc cctggctcct accagtcac 2460
aggcagctct ttggggtttt gcagactttg gcttcatgtt tgaaagctcg ccgggcggca 2520
atctcggctg ggaacccgac atcaagctga cggatgagat ggtgatgatc atggggggca 2580
agatggaggc cacacccttc aagtggttca tggagatgtg tgtccgaggc tacctggctg 2640
tgcggtgagc ctgggtgagg gccagggtgg aggcggaggg ggtgtgtgga acgttctgag 2700
atccccctta ggatgaaggg aatccggttc cagagagtga ggtaggtgct agcagccacc 2760
tgctgaccta cacctgtcct ttggtcacct ctgtctgccc acctgtgcca gtaaattctt 2820
gctctggaca tctaattcca accaccttcc ccacgatcct gccacgcct tcagccatgg 2880
gctctccctt tctgggcac ccacccacc tgccacaaa gcctgagcac ctgccacccc 2940
acaggctacg tgccaaagat gggctttgtc ccagtttcat atacaggtca cttggccaag 3000
gccacagtcc aacctgggtt catccccact gccctgcaga gaaaggcagg tcagcgtgtc 3060
tgcatccac ccaagtgcag aagccatggc cagcagcctt atgtggggga cagggcagga 3120
cactcagcct gtccagagtg cgtgtgggca gcccttgcct gggcggtatg ggttaccaag 3180
tgagcagat cgaaagtgtc ctgggggatg tgcaagatgt ggcaggcgag gtgggtggca 3240
ggagcccaca cctgaggctg ttggcatcag ccagtcaca ggactacagg cagggccacc 3300
acctaggctg gcctcagccc accgtccct cctatctctc ccagggcct acatggacgc 3360
ggctgtctcc ctggtcactc tcatgttgga cacgggcctg ccctgttttc gcggccagac 3420
aatcaagctc ttgaagcaca ggttttagccc caacatgact gagcgcgagg ctgcaaattt 3480
catcatgaag gtcacccaga gctgttctt cagcaacagg agccggacct acgacatgat 3540
ccagtactat cagaatgaca tcccctactg aggaggggac cttcgagggc ctctgcccc 3600
tgtgccctca aagctgtccc acaatcatgg agccctgcga cctccctgcc ctgccccac 3660
atgcagtgga ggagaggcct gtggcccaaa gaacctggta gcgcctcctg gggcagcacg 3720
tgggtggcgc agccttggtg acgcatgga ctgcagcgac aatcaatgga tgggtgtgtc 3780
tatgcacagg tgtgagtcct ctgtttgcac tggacatatt ccctacctgt cttatttcat 3840
aggtacatga agtattgtgt ataaaaaag agataagatt taaccaacat caacaaaata 3900
aaaacccaaa atagtgtgt gttgg 3925

<210> 308

<211> 3679

<212> DNA

<213> Homo sapiens

<400> 308

acagccacca	ctgccagccg	cttctacagg	atcgaccgag	cccaggtgag	cgattgcagg	60
cctgctccag	ccacagctgc	ttccgggccc	cagggtcgcc	tctcctggga	cgcttccct	120
gtagctccc	ccgatgggct	cacctctgtc	ctcatgcctc	tgagagcttt	tactattgcc	180
tgtgtgcatg	gacagcgtgc	ggccctgccc	tccacactgg	agagtatagg	gcggtgccag	240
ccagaaaggc	agtggggtag	ctaccaaagg	cttgctgggt	gggtaggagg	gcctggaagc	300
ccagagccat	ccaggagagc	acagaagcaa	aggcattctg	gtcaggcgcc	agctcacctg	360
gtaaagtctg	ggcagtcgga	ggaggtgtca	ggaatgggaa	ggagtgggag	agggacaggc	420
aggggccctt	gcctggccac	ctcctttcag	tgttttgtgt	catggcagag	gcttctccag	480
gtctaccagc	cttgctgccc	ctcggccccc	accgtcaggt	gccctgacct	cccgcctga	540
cctcccccca	caggagcacc	tcaactatgt	gactgagatc	gcacaggatg	agatttatat	600
cctggaccct	gagctgctgg	gggcacggc	ccggcctgac	ctcccaacc	ccacttcccc	660
tctccccacc	tcaccctgct	caccacgcc	ccggtgagtc	ctggtgtccc	gtccctccag	720
cccctggctt	tcagccccac	ctgtaagccg	atgacttctg	aatccctgct	tctageccct	780
ccaccagtta	actaaatggt	gtcaacctga	acctggccaa	agcccacctg	acggccttca	840
gccctgtggt	tctgtgggga	agcggcctca	cgtccaccct	ggttccctcc	ctgacttctc	900
cctcctctgg	acctcatcct	tcagccagtc	ctggcagccc	ccggaccac	cacctgagca	960
ctctcccca	cccctactgc	caccagccct	tcccggctgc	cacgccctgg	ccccagctc	1020
ttatatccct	gtggccattc	gtgccctcga	acccccatct	ccataccacg	gtcaactaaa	1080
aatgcagagc	ataccaggcc	actccccaac	ctagaagctt	ctttctcagc	agccctttgg	1140
acgtggattc	tccccaggcc	ccccgtcatt	gcactgggct	cccagccccc	tccctgagtt	1200
cacctccatg	gtcctgcccc	actctcttct	cttggttctt	tgaggcttca	ggtgtttgcc	1260

accactggac ttctgtcatc gctgcctcca actcttcccc catctttccg gagctcccc 1320
acccccatcc ccttcgaatc tcagcttggc tgtttcctcc ttggagagat cactcccagg 1380
accccctctg caggggtgcc acatcacctg ttctgaattc ttaagagcac ccctgctctc 1440
agaactcctt atttatttga cttgtttgta tccctgaact agaatgtaag ctccatgagg 1500
gcaaggcctt cctctgtctc gtttccttgc tgtatcccca gtgcctggaa tagtgcttgg 1560
tgtgtagcag gcactcaata aactgtggaa aggatgaaga tgccccagt tgggggttggg 1620
gagggcgacc agctggcctg tgccgtagcc ggtcacagca catcatgctc tgttgtaggt 1680
cactgcaagg ggatgctgca cccctcaag gtgaggcctc tccctctggg gccctcctt 1740
tctgcctggg tgggggcagg aggctcagtg ggggtgggat agggcccaga cacagcctta 1800
cacaacaca gcctttgagc ttcacgcacc aacggagccc tgggcacaca tgcctggccg 1860
gcacagtcct gtccactgag gcaccaaccc aagcccaggc ctccgactgc agagtaacag 1920
gcaggtattc cgtgcaggtg aagagctgat tgaggctgcc aagaggaacg acttctgtaa 1980
ggtactagct ccaggtcca gttccttccc ccagcagctc cctcgggccc tggggagcga 2040
ggcctctggg ttgggccaag agctgacctg ctcagggtgt gtcactgtc ttcgtctggc 2100
cctctgtggg atctccagtg atcgtcccat tccacttcac tgtatctctg tctaggccac 2160
aatagatggc tcctagtagg ggcttccatg ctcagtccac ctgtccctgg tgcttagaaa 2220
ggagcaggtc agaggaagca ctgctccagg gcttggtcac cagtgtgcc agagagccca 2280
caggctgtgg ggtgagaggc ccctcctccg gtgtgtcca gagagacca cagaggcaac 2340
tcaggagtaa gatgtgtgag cgcactcgtt tcaggcctgt gctgggtgtac ccggtgtgg 2400
gccagcgtgt gagctcaggg aaggaggggt ggccccagga ggtccagccc tgccatgcct 2460
cctgccctca gctccaggag ctgcaccgag ctgggggcga cctcatgcac cgagacgagc 2520
agagtcgcac gtcctgcac cacgcagtca gcactggcag caaggatgtg gtccgctacc 2580
tgctggacca cgcccccca gagatccttg atgcggtgga ggaaaagtaa gtatctgggc 2640
agtgcagaac cgtggtcacc ccggaacca cccttttccc caccctccc attttgtcag 2700
gtcagagccc ataaacttcc tggtcacatc tgtcatcccc tgggccacc ctattgcccc 2760
agagccctga acttctgcc ctttctgatg gcccttggga gacagatggg tggatcaggg 2820
gacgggatgg ggtacacagc cagcccctgc tccccagcg gggagacctg tttgcacaa 2880
gcagcggccc tgggccagcg caccatctgc cactacatcg tggaggccgg ggcctcgctc 2940
atgaagacag accagcaggg cgacactccc cggcagcggg ctgagaaggc tcaggacacc 3000

gagctggccg cctacctgga gaaccggcag cactaccaga tgatccagcg ggaggaccag 3060
 gagacggctg tgtagcgggc cgccacggg cagcaggagg gacaatgcgg ccaggggacg 3120
 agcgccttcc ttgcccacct cactgccaca ttccagtggg acggccacgg ggggacctag 3180
 gccccagga aagagcccca tgccgcccc taaggagccg cccagacctg gggctggact 3240
 caggagctgg gggggcctca cctgttcccc tgaggacccc gccggaccg gaggtcaca 3300
 gggaacaaga cacggctggg ttggatatgc ctttgccggg gttctggggc agggcgctcc 3360
 ctggccgcag cagatgccct cccaggagtg gaggggctgg agagggggag gccttcggga 3420
 agaggcttcc tgggccccct ggtcttcggc cgggtcccca gccccgctc ctgccccacc 3480
 ccacctctc cgggcttctt cccggaaact cagcgctgc tgcacttgcc tgccctgcct 3540
 tgcttggcac ccgctccggc gacctcccc gctcccctgt catttcacg cggactgtgc 3600
 ggcctggggg tggggggcgg gactctcacg gtgacatgtt tacagctggg tgtgactcag 3660
 taaagtggat ttttttttc 3679

<210> 309

<211> 4116

<212> DNA

<213> Homo sapiens

<400> 309

gtaacaagga gctgccacag tgtctctctt gagcagcctg ggcctgcac tcagcagcac 60
 catcttgacg gtgagatgct acctaccaag gaaggaagcc agtctggcta taaccagtgg 120
 ctgccgtttg atgaaagagc tcaggagctg aggtgggaag cctggagcac caagttccac 180
 ctgaaagcag agagagaaga atttaagggtg caaatagatt tgagagaatg ccaggcgtag 240
 tccagtccca tggagtcccc tcagcctgtg gtgatgggag aagcacctca gatttgtggt 300
 tggtgtttac aggccccctg gctctgccat ccagatctaa gtattggcgt tcacctccta 360
 gtgacaaagt acaagtcaag ggactgggac gggagaggtg aaccaaacag gtcattcattc 420
 cgctctgctg aggctgctgc ttttgccctca caatgactca tctatctcct aaggacactg 480
 ggatcaccca caggatgcag gtcactaggt tttcggtaac agcagcttca gaaaagattg 540

ataaactcct gtcgcattcc cttctctcca attccccact gactccccctt actgcaaaag 600
cccaggaagc cctcaagtct tcaggtctca ggccaaaggg cctgggcact ggagggtgtt 660
caaaagcgag acagaaaaat cccagggggc tgtgggacca agtcagcctg tgctgtgagg 720
ccagctgcaa aggatttatc acctgggcca agtagatgac tctggtgact tccttcctt 780
ccacagtgat gggctgcaag atccaggcac tgggcaggat ctccccgca accatttttc 840
tgctgggtct tggcatggat gtatcataca cagactgggc tgccatgaca gacaggtgac 900
cctggggaca gagggaaatg ggagtcctgc ctgtgtagtg tggacaaaac aggaacaggc 960
tcccgtgtag acagtatggt gaaaggcaac actgggccag cttcaagcc acccctacce 1020
tggtccagc cccaatttgc ctccttccc ctagaggacc tgaggccac atagattgtt 1080
tctcacgaca cttcagcca agttcttccc acaacatctt taccaccaag gcaggcacct 1140
ctttggcttc cacgcagaca caacagaaat cccgtggctg cttcagtgcg cacagggtgg 1200
tgttgacac caagtacact ggagggacag ggataaggaa ggtcaggagg cccatggaca 1260
gacctagtcc taaagccttc ctggtcaggg agccctcccc ccaacacccc atcacttgac 1320
acctagctca acctaggctg agcaatcaag gtaacctgag tacctggcct ccaaagaggg 1380
ctgcctcaa cctccacct ctatcccca gcaagacccc actgggcaca ccagaaacta 1440
ggcccatgg aagccttct tccctgggt caccaggt gatgctgttg gtcactcgct 1500
gatgcagcct tgctgtctgg atgggcttgt aatacagggg ccacacagtg gggtcactga 1560
cagccgcca cacacgagac agcggctggg acaccacacc tgccccagg aagccatgcc 1620
gagtgggaga aaacaccttg tagtaaagct gcaccgcctg ctctcacc tgatagctgg 1680
ggggagacac caagcacaga aaatagaaag ggggtcaaaa tgggctctaa gggtcacaaa 1740
ggaggggctc agagtgaaga cttgaggaat ccaggtagg gaaaggagga gagaagccaa 1800
gcagggtgac aagcttacca agacagacac tgtacaaagg accctaaaca aacttacttc 1860
cagccagcag ttgcctggca gctgaagagg ttgtgcaaat tatccgaaca agcagccatt 1920
acctggggac acaatggcca caccxaaatt aggaggcaca gtaaaaacta agcccctggg 1980
ttagtcagtc tggcctgcat ctgctaaatt ccccttttct tttttttga gacagggtct 2040
agctctgtcg cccaggctgg agtggagtgg cgtgatcaca gtcactgca gcgttgacct 2100
cctgggctta agcgtacctc ccacctcagc ctcccagtct ctggggctac aggtacacac 2160
caccacgccc agctatcttt ttttattttt ttggtagaga cagggtctca ccatgttgcc 2220
caggctggtc ttgaactcct ggactcaggc aatcttccca cctcagctc ccaaagtgt 2280

gagactacag gtgtgagcta ccacgcctgg cctaattgttt tttatttttt tgtagagacg 2340
gggtcttgct atgcttccca ggctgggtctc gaactcctga cctcaagtga tcctcccact 2400
tcagcctccc aaaatgttgg gattataggc atgagctact gcgctgacc cgaattcccc 2460
tcttctcaag atgaagaacc actgaagatg cccacaagcc ttgggctcct catctgcccc 2520
gcttttttcc tactttctct tcctgcacac ccagcagagg tctgggtaaa ggaatggtag 2580
ggatgggtgg gagcagttac tcacatcagc catagaagtg tccacgacat gcttggccaa 2640
atcctggtag gaggaggaaa agcaggtccc caagctggac agactggatg gtgaacagca 2700
gcaactgccc agggaggctc tgtggcctac aagaaatagg tggaggccct gtgatagcac 2760
tgaacatcag ggcctcagga cagcaacagc tctcccacag accagtgact cactaagatc 2820
tagcagccat cagcccccaa gtccccaaac caggcagctg gctatgcca acactccccg 2880
caactcactg taggcagagt tcttctcac tgcagaatgg cctcctcgct catcccctat 2940
ccatacatcc ctggaatcag gcaagtttgt atgccctgc agaagagagg atactcagga 3000
cagagccaga aggcaagcac agaattatct cctctgcctc tgaactgcat ctcacagctt 3060
ccagtgggat gactcaactg caaaggtctt cccagatggg aatacaagag gctcgatgtc 3120
cccaaagaa gaccacagca atagaaatag gtatctagac gatctctgct cccctctaa 3180
gccacaggca gaggctgctt acaggagagt tccaacaggg atcaaaacaa ccagggcctg 3240
agagtatggg gtgctctgcc agcttccaag ctagggggta ccagggatca gtgcatgaga 3300
ggctctctgc accaccggg caacaggaat gaggccatgg ctagaggggg tttaacgggg 3360
taataaatgt ggaagatggg atgggaggaa aagtaatggg ctatgaaaag ctgaacgctt 3420
gacccccacc ccaggtgcag cagccaagct aaaggtccta actggggatt agatgggggtt 3480
accctctgga tctgcaatgt ggtcaccaca cctccaccgc agcaagctcc tcaacaatag 3540
gacccttgac ctctgctgga actcacaggc acccaccatc ctacctcat catcaccttt 3600
aacctactgc tactctgac acaataaagg aggaaacaaa gacagttctc tatccacctt 3660
catctccttc tcacctgctg tcacagacag caggcccttc tgcctctggc ttagctctca 3720
cgctgccctg tcagaagcct ttcactactg atcaccagtc tcttcaattg ttgccccac 3780
ctcttctct tcaactggatc tttctatta gctacaacac ttggctaatt ttaaaaaaaa 3840
at ttgggggc cgggcggtgg ctcatgcctg taatcccaac actttgggag gccaaaggcg 3900
tagatcacct gaggtcagga gctccagacc agcctgacca acatggtgaa acccatctc 3960
tactaacaat acaaaaaatt agccgggcgt ggtggcgggc gcctgtaatc ccagctactt 4020

gagagaatcg cttgagccca ggacgcagag gttgcagtga gccgagattg tgccactgca 4080
ctccggcctg ggcacaacag agagagactc catctc 4116

<210> 310

<211> 3363

<212> DNA

<213> Homo sapiens

<400> 310

tgaatgcgcg gtgactcaaa agtgctggcc acgcgctcgt tcatccaagc gcgaggggct 60
gagttgggaa cttggtttgc ctcctggggc tccggctcgt gcaatgtgca aggcgggggt 120
gcggaccgag agagcgcgcg ttctgggcag tccccgctgg agacagcgca gtgggcgcca 180
tcggcctggg gatggagatg gtccactcag gcgggggtcg gggggacgcc aggagtgggtg 240
actccgggtc cccgggggag cgtgccgggg cggagcccac cgcgcggttc tcccggcacc 300
gccgagccgg gcagaggccc tggagcccaa ggccccgcgc ggccccacgc caagggcgcc 360
aggcctgcct aagagccgtg gcgctgggaa cccggctacc cctgggccgg gaacctgata 420
accagctcca gcgcgagcac caggggcgct caaggtgaac gcgccgggcc cggggtccgc 480
ccccggcgcg gccccgcccc ggccccggcc ccgactttcg ggcagccctg cccagtcccc 540
tgtcctggcc cagccccctt ccatcccagc gtgccgtgcg cggcggcggc gcgcgggcgc 600
ctggggcggg acttccggcg cgctggagcg ttttccggcc gtgcgtttgt ggccgtccgg 660
cctccctgac atgcagccct ctggaccccc aggttggacc ctactgtgac acacctacca 720
tgcggacact cttcaacctc ctctggcttg ccctggcctg cagccctgtt cacactaccc 780
tgtcaaagtc agatgccaaa aaagccgcct caaagacgct gctggagaag agtcagtttt 840
cagataagcc ggtgcaagac cgggggtttg tggtgacgga cctcaaagct gagagtgtgg 900
ttcttgagca tcgcagctac tgctcggcaa agggccggga cagacacttt gctggggatg 960
tactgggcta tgtcactcca tggaacagcc atggctacga tgtcaccaag gtctttggga 1020
gcaagttcac acagatctca cccgtctggc tgcagctgaa gagacgtggc cgtgagatgt 1080
ttgaggtcac gggcctccac gacgtggacc aagggtggat gcgagctgtc aggaagcatg 1140

ccaagggcct gcacatagtg cctcggtcc tgtttgagga ctggacttac gatgatttcc 1200
ggaacgtctt agacagtgag gatgagatag aggagctgag caagaccgtg gtccaggtgg 1260
caaagaacca gcatttcgat ggcttcgtgg tggaggtctg gaaccagctg ctaagccaga 1320
agcgcgtggg cctcatccac atgctcacc acttggccga ggctctgcac caggcccggc 1380
tgctggccct cctggtcate ccgcctgcc tcacccccgg gaccgaccag ctgggcatgt 1440
tcacgcacaa ggagtttgag cagctggccc ccgtgctgga tggtttcagc ctcagacct 1500
acgactactc tacagcgcag cagcctggcc ctaatgcacc cctgtcctgg gtctgagcct 1560
gcgtccaggt cctggaccgc aagtccaagt ggcgaagcaa aatcctcctg gggctcaact 1620
tctatggtat ggactacgcg acctccaagg atgcccgtga gcctgttgct ggggccaggt 1680
acatccagac actgaaggac cacaggcccc ggatggtgtg ggacagccag gtctcagagc 1740
acttcttcga gtacaagaag agccgcagtg ggaggcacgt cgtctttctac ccaaccctga 1800
agtccttga ggtgcggctg gagctggccc gggagctggg cgttggggtc tctatctggg 1860
agctgggcca gggcctggac tactttctacg acctgctcta ggtgggcatt gcggcctccg 1920
cgggtggacgt gttcttttct aagccatgga gtgagtgagc aggtgtgaaa tacaggcctc 1980
cactccgttt gctgtgacgg gtctgctgca gtcctcagtc gggggtcctg ggcacatgt 2040
gactcccat cctccatga ggggtccctg ccctggatga gtcctagctg ggggacaccc 2100
tgagagctcg agccctccc acccgggcag ccgctggctg cctcctgtca gctgggcagg 2160
cggggccac agtacctgcc ccaccaggac agcctggctc aggcctttct gggctgcttc 2220
tcacatcctg ggctggatgt gggtttgga gctctggaac catcccggac tcgcccactc 2280
ctggattcga gggccctcgc agggacagct ctgcccagca tcaccccagg gcctggcagt 2340
ggtagagctg agagctccac cccacatac ctgccacca cctggccagc cacagcacgt 2400
gtgtcacctg cagagagcca cccagacgtc cccaccgagt ccagcacggc aagggtgcag 2460
gggctgccct agaaatggac tcagaggagc ctggcccacc ctcttgaaac tggctcctgga 2520
ccttggtcga gctctgccgc ctcaggtagc acgaccccca ggccagcctg gacacatcag 2580
ggagcatggt gaggggcaac ggcaggaccc gtgggccata tcgggacagg catttccagc 2640
gaggggtggg gcagaggaca tgtggctggc aggctacacc caccctgcca tgcagcggtg 2700
tccaggctct ggggaggccc tggggaattt ggaggcatca tgagccaagg cctggtggcc 2760
ctcgttcccc tgcccctcgt caccatcctg tccttggtg gccgtgagga ctcccctcct 2820
caccactggg tcccacaggg ctgaggtggg cagtagaggg cataggtggg tacatgtccc 2880

gggcaaggctc tctcgggggg acagaagtga gtccagggag tgggtgggcc tgggcgtccc 2940
 tcactcagaa tgccgtgggg tgaggacggt gaggacaggg tgggcactgg gttctggttt 3000
 agagtcagta atgttagggc gcagtgggca gggggtcagg acatctccag ccggtggtga 3060
 ggaagcatgg tggggtctcc tccacaggac gggagctggg gaggggggtcc tgggtcggac 3120
 ccaaggcacc cacacttgag aaagcctccg cctggacgtc agggaggcct gcgagctgcc 3180
 acagtgcagg tgcagccgtt cccaccgccc tgctgctgct tgacacgggc ataggagata 3240
 caagtgggtgt gtgcggcggt tcatgcctgt aatcccagta ctttggaag ccgtggcggg 3300
 aggaacgctg ggcaacatgg tgaaaccccg tctctacccc ctaaaaatag aaaaattagc 3360
 aag 3363

<210> 311

<211> 3615

<212> DNA

<213> Homo sapiens

<400> 311

atgacattgt ggactccctc agtgtgttgt ccaaaactca gcatgacctc agctccttcc 60
 tgggtggacat gtgttaccag aaggcaagca cctgcttact cccttggaca ggccctgaga 120
 gccagagggtg ggtaggaggt taagggggat cctgagcact ggagctcttc cttttcagaa 180
 atggatgctc tacttttctg tctacggtgt gttgaaagaa gaacacagtg atggtagcag 240
 ctctcctcaa ggagaaaata aagggtggaga ttcttcccag gggaattttg gaaaggagaa 300
 ccttcatgat gaacatgatg gcaaccctc taccttaca cccgatagta ggagtgtgaa 360
 atgccatagt gaataccaag atagaattcc tccagagaga gaagtggaga agaacacaca 420
 gaatggagac ccagggacct ggttcaaggt cacaattcct tatgggataa agtatgataa 480
 gaggttggata gtgaattcaa tccagagcca ttgcagtgtc cccttcactc cagtcgcttt 540
 ccactacaac aaaaatcggg cccatttctt tattcaggat gctagtgtg cctgtgcatt 600
 aaagaaagtc aactgcaaga ttcattgatga ggaaaaccaa aaggtatttg tttttgtcaa 660
 tctttctact aaacccagct ctatccagaa aatgttgaaa ccaaagaga tggcatagct 720

aaagctgacc ctgaacaaat gatatgatgt ctcccagcaa gctcttgatc tccagaggct 780
ccgctttgac ccaggtatgg ctgacagcag caattctagg gcaagtaggg gcagagcagt 840
ctgcctggaa aggagactta tatggacggc aactttggga gggttggtgc tgggtgctggt 900
ccagtcaggc cccttacagc cttctgatgc ctttctctcg gcttcctgga gacttggtga 960
aacatcatat tgatataatc ctgaatcaaa gaaactacat ggctgccact ctgaagatca 1020
ttgaaaggaa ttccctgag ctattatctt tgaacttgtg cgacaacaaa ctgtaccacc 1080
tggatggcct gcctgacatt atagagaagg ctcccaaagt caagaccctg aatctctcca 1140
aaaataagct gaagtcggct tgggagttgg gcaaggtgaa agggttgaag ctcgaagagc 1200
tatggctgga agggaactca ttgtgcagca ctttctctga ccagtccgcc tatgtaagta 1260
tcatccggga atatttcccc aagttgttat gcctggatgg ccaggagtta gcatctccaa 1320
ttataattgg cattgaagcc cctgagataa taaaaccttg taaggaaagc tataaaggat 1380
ctgagaccat aaagagtctg gtgcttcagt tctgtctca gtattacttg atctatgact 1440
ctgaagatcg aacgggtctc ctcagtgttt accatgacaa ggctgtctc tccctgacca 1500
ttaccctcaa ccctgaggac ccagaaccga gcagcttgga aaaatacttc aaggatagca 1560
ggaatataaa gaatatcaag gacccttgcc tgaggattca gctgctgaag cacacaaaac 1620
gtgagattgt ggactccctc agtgtattgc ccagaactca gcatgacctt aactcctatg 1680
tggtagactt gtgcatcaa acggtgagca cctgttctc ccctcagtca ggcccagaga 1740
gctgaagtag gtaggaagta ggtaggtggg taggaggatc atgaaggctc tagttttttc 1800
ttcttccctt tcaggaaagg atgctcgtct tttctgtcaa tggagtattt aaggaaggtg 1860
agtgctctata gattcttctc tccagatcac tcattactcc cttccccagg ctgggcttac 1920
tccaagaact ctctcagctt cccaagttgc tcttctcccc ttcccttgca ttcttctct 1980
ccgtttgtgt tcttctctc ctggcaactt tctgttatct ttgtgttctt tcctttttgt 2040
tcccttccct ttgtgttctt cctctcccc aattttgttc ccaaacatca ttacttctg 2100
acctacatcc atgcctgtct gcacctgcac cactcaggcg ttagggacac agcctgtaga 2160
gtttgatggc tctcatccca ggttggttact ttgcgaactt gggacattgt cctgttacct 2220
aaccctcag tttctctatt tgcaaaatgg ggttggtgaag ctcatctctt gggtgactgt 2280
gtaaaatgaa tcaagcgaac tcatgtttgt caagagacct gacacatgtt aggggggtct 2340
atccctgggt gccgcttggt cctatttttg ccctctcagt ccctgaaact ccctcctgac 2400
tctcactgaa aagttgtccc agcctggctc cttcagggt gccaaaagat tatctccctg 2460

actggagaac cctgtatgaa tgtgtaaagc atgtgcaact gtaaggaggt atcattgttt 2520
gttgtttcta aagtggaaag agagtctcca ggttctgttc ttgccttcac ccgaaccttc 2580
atcttgactt ctgtcggcaa ttccaagtaa gtgctgtgct gtgggtggga gcacccatcc 2640
tgtcctggag ccaatggtgt ggtaatgtgg tggcgcagtc ctcgggatgt tctcagtacc 2700
atagaaagcc aactggtaga tccaaggaga ggtctagatt atgagaatac cagatttctt 2760
ttttggccac aatacttact aattagctgt gtatcttttt gtccagttgt aagatttctc 2820
tgtgaaacag tccttttctg aaaatgggat gtctacttct tttgtaaagt gtaaattgat 2880
tgggggttaa tctacaaatc taaggaaact ggtaggcaat ctctccaaag gtggactctg 2940
cagcaggggt aaagcctacc agccaaggaa tccgaaaggt gggcagagca ggggcttgga 3000
aggaatctgg ttcctcagtg gcagtggag caggatcatt gttgaaagtg tggggttgtc 3060
catttttcca gttgtctgag agcttgtctt tccttcagtc tgtatattgt gaatgacaag 3120
ctgattgtga ggaatgccag cacgaaggag acccagagtg cttctccat cccagtgcct 3180
gcaccctcct ccagctcctt gcctaccctc tcccagaagc agcaggaaat ggtggagact 3240
gtctccaccc agtctgggat gaaacttgag cagtctcaga agtgccttca ggacagtgag 3300
tagaactaca ccaaagctga ccaggttttc actattctcc agaccgaagg caagatctca 3360
gtggaggcct tcaagcaaat cccctaaaag gagcccttcg atgtcttctt tgtcctcatt 3420
cacatcctct ttgtttctc tttttaccag cctaaggccg tgcccaggac tggggttggc 3480
agcctggctc accggaaagc caaagttaac ttgcaggccg ggtaacataa ccacttgaag 3540
aaccagttgt tctgtgtatt cgccccactc atgatcacca tttattttca taataaagag 3600
tgatgttaca tggtg 3615

<210> 312

<211> 3559

<212> DNA

<213> Homo sapiens

<400> 312

ccatcagacc ctatcttaaa ttcctttggg agagggacaa tgttttgata atctttatat 60

ttccatagta catagcccag tgccataaag cagaaactac aaaaatatca aatttatgag 120
aaagctccct aaagagcttc attgttttta atttttttat tttaaatttt tgcaggtaca 180
tagtagatat atatttatgg agtacatgag atgtttggat acaggcatgc aatgcacaat 240
aatcatatca tggagaatgg ggtagccatc ccctcaagca attatccttt gtgttgcaaa 300
caatccaatt atactctttt agtagtttta aaatgtacaa ttattatcaa ctatagtcac 360
cctgttgggc tatcaaata taggtcttac tttattcttt ctattatttt tgtaccatt 420
aaacatcccc acctctcca acccccactg ccctacctag cctctggtaa ccgtccttct 480
actctctatg tccatgagtt cagtgtttg attttttagat ccataaata agtgagaata 540
tccaatgttt ctctttctgt gcctggctta ttttacttaa cataatgatc tccagttcta 600
tctaggttgt tgcaaatgat atgatctctt tcttttttta tggctaaata gtactccatt 660
gtgtgtatgt acattttctt tatccattca ctgttatttt aaattctcat tcttttaaaa 720
ttttctttga gattgtcagt tctttaagtt ttgatcttt ttaaccatt gtccctttag 780
aatttctttt cattcaatta ttcctatctt caatttttgt ttgaaatctg ctttcttagt 840
atttttagtg gcatatatat tacactttct ccagcatgtt cctttacaca ccagtttgac 900
atagaattat gttttcctgt tatttgtcat ttctgtcct tccttatttg tcagaattca 960
gtacactcaa ataattccca ttgtggcttc gttaaaccct ggagagatga aattattaat 1020
aagaaaatct agatgtatta tagtctttgc tctttgcaga atgcagctgt tagcagatgc 1080
ctgattagtt gatatactcc atcactatta ttatttcaca ctttgtcctt ttgcttaaaa 1140
gagagcagtc tggattttat tactaattac ttataaagac ttcttaaagt taggggaaaa 1200
aaacaaaact agtctcatga tatagtctca tgatactgaa gtgagtcttg gtttgtttgt 1260
tttttcccca ccttaggggc ataatcaacc catttcctgc ttcaaaagga atcagagctt 1320
ttccacttca gtgtattcac atagctgaag ggcatacaaa agctgtgctc tgtgtggatt 1380
ctactgatga tctcctcttc actggatcaa aagatcgtac ttgtaaagta tggaatctgg 1440
tgactgggca ggaaataatg tcaactggggg gtcaccccaa caatgtcgtg tctgtaaaat 1500
actgtaatta taccagtttg gtcttctactg tatcaacatc ttatattaag gtgtgggata 1560
tcagagattc agcaaagtgc attcgaacac taacgtcttc aggtcaagtt actcttggag 1620
atgcttgttc tgcaagtacc agtcgaacag tagctattcc ttctggagag aaccagatca 1680
atcaaattgc cctaaacca actggcacct tcctctatgc tgcttctgga aatgctgtca 1740
ggatgtggga tcttaaaagg tttcagtcta caggaaagtt aacaggacac ctaggcctg 1800

ttatgtgcct tactgtggat cagatttcca gtggacaaga tctaatac atc actggctcca 1860
aggatcatta catcaaaatg tttgatgtta cagaaggagc tcttgggact gtgagtccca 1920
cccacaattt tgaaccccct cattatgatg gcatagaagc actaaccatt caaggggata 1980
acctatntag tgggtctaga gataatggaa tcaagaaatg ggacttaact caaaaagacc 2040
ttcttcagca agttccaaat gcacataagg attgggtctg tggcctggga gtgggtgccag 2100
accacccagt tttgctcagt ggctgcagag ggggcatttt gaaagtctgg aacatggata 2160
cttttatgcc agtgggagag atgaagggtc atgatatgcc tatcaatgcc atatgtgtta 2220
attccaccca ctttttact gcagctgatg atcgaactgt gagaatttgg aaggctcgca 2280
atttgcaaga tggtcagatc tctgacacag gagatctggg ggaagatatt gccagtaatt 2340
aaacatgaat gaagataggt tgtaaactga atgctgtgat aatactctgt attctttatg 2400
gaaaatgttg tcctgtactt actaggcaaa acgtatgaat cggattaact ggaaaatata 2460
tctgaattca actgctgact ataaatggta ttctaataaa attgtgtact atcctgtgtg 2520
cttagtttta agatcaacca atagatatat atcctacaat tgatatattg ctttattcac 2580
acttttattg tggctgaatt tttgtgccta tctataaaac acactttcaa attatttgaa 2640
ttaccaagac gtctgctttt gtgacagtca gaaaacacac ctggaatacg atgcagccca 2700
ccattaactc attcatgtag tttattcaag tgatttatgt atttaaacta aatattgaaa 2760
atgttagtca aattgtgggt tgcttgtcag gtatttatat cagtctgtag tggattccca 2820
aatttcaaag ctcttttaat gtaatggaca aaaataagat atgagaatat tattgatgaa 2880
ttttcataag gtggaattga tcttaatcta ctaacagaga agggtagaca gtttgtgtta 2940
aatgttggca tttacttgta ttgaccaaag ttttgcagct ctactatatt ctgtgctcag 3000
gactaaaatg ctgttaattt tttttttttt ttccagtgtc gtgcatatat tctgtgatgg 3060
gaaacattgt tgatgtccta acagaaatat attttgatct attttcctat ggagttgttt 3120
ctattatgac catttaattt tgtttttatt taatagtagt atttccttcc cttttatcta 3180
attttttata tgctgctaaa tatattttaa atatactatg tttgcgaacc ttggtagcta 3240
tgatgagagc tattatcatc tgtgggtggga aaagctatgt aaataggtag attgtataga 3300
gagactatct tgtgttgtgc ctgtatgaat ttttaaaaagt tgttgactgg attttgcaaa 3360
aggatgtata atatttctgt ctgctcagaa tattaatttg taaattctgc aagtttaatt 3420
tttatgtaga tgggtataaca tttgaaaata ttgtcttatg tgattttttc ccctgaaaat 3480
atttgcttgt aaatgaaaac ttagctaggg cttaaataaa catgttgcta tgaaattaaa 3540

aaaaaaaaa aaaaaaaag

3559

<210> 313

<211> 3354

<212> DNA

<213> Homo sapiens

<400> 313

tgttacaggt gcaggcacca gaatcagacc ccctttccca gccctgtgct gtgggcaaat	60
gatgaaacca gcttcattct ccacctgtag ggtaggggtg agagtcccag ttcacaggtg	120
actgagaaaag tgcagaatgt tagcgtgatg ttaacacaca taggcactca gtacggttga	180
gcatgttttg ggggtgggat tgctgggggtg ggcaggggga ggaggcccca tcttggattc	240
ttagagggtg atcaacttcc aggctccaca gactccccag cctcactgtc ggggggcact	300
ggctctcctg tccggctgat gtctataaag ggccccctgtg aaggaggcg tcttgcaagt	360
tgcaggttga gcgtccgctg taaggaggcg gtgtgtgtgc aggtgtgtgg ggcttccagg	420
acagtgtctt tctgggggtct tagagggtg gagccaacag ctctttgggc ccagggcagt	480
tctttctgtg gctgcggcac ctccccgctc cctgctcccc gctaagatga ggccgcccc	540
ttgtttctcc ggggcagtct cccttccgctc tgccctatgc cagagactga gcgctggcga	600
ccgtgaactg tgtgtggtgc cgctgcacgc cctcctgggt ccttcagggc cagtccactc	660
accaggcacc gtgtggcagg gaaggagccg agggcgacac tggctgtgaa gcggggcttg	720
agagctcacc cccggggatg ttggagctgc tctgagcagt tagggggcct ggggtgggtct	780
cctgtgcccc cactactccc agccccctct gaggcagcgg cagaggcttc ctgttttcat	840
ccatctctct aggactgact gtatgcaggg ccggcgggcc cccccccaa aaaaaaccct	900
ataaaagctg agtacaactt gggccagaac ccagagttc tgagtgtcca gaaggacac	960
tggaggcagc ccctacacc acttcccaga cacatcatgc tgtgaggagg gggctctgct	1020
gtgagcctgc acacctgaga ggggcacccc tggcaactgc atgaaagatg gtgccagagt	1080
ccccagggca caggggtaga gggtgaccag gttccgggcc ttgggctagg tgcttctgcc	1140
tacatttttc cacagtgggg aagtaggggg aaacttttac agaagcaagg tgcagcacc	1200

caccctgaat cacacaggca ggagagggga gccggcattc agactccacg gctgggggtgg 1260
tcctgggaga gggacctgac tgcgtctccc aaccgtgcac cccagcccct ggccacgcag 1320
cccatgtgcc cctgggctct tccataatct ctccattgac tgctagagcc acctggggac 1380
tcagactcgt gtcagcccca gagggagtgg ctgggaggaa gaaagtgtc ccagagaact 1440
ttgtccctcc tgcctacccc ccgactctgc accctgcac tcctggcagg gaccagcct 1500
ttccccctca gcaccaacag ttatgccccca cccgggaaag ggggtgcaagg tccttggaa 1560
gcttggcaac tatcaaagac agagaaggga ggagaagggg gaagcaagag ggagcccgc 1620
gcctccagct ctgagaaaag ggaaactgag gcaactgaaag actgagctag actgacctgg 1680
atcggtcctg ggcccaggat tccacctagg tcagaaactc caccgggtgt ggtggtccac 1740
acctgtaacc tgagctactc aggaggctga ggcaggagga tcgcctgcat ccaggagtcc 1800
aatcaaggct acagtgatga gctgtagtgg cgccactgtc ctctggcctg ggcgacaaag 1860
caagaccctg tctctaaaac tgccctaggc cctctgctgt acagcaccgc tgccccctac 1920
ctgttactcc aggaagaaac caaggtcaaa atgtccagca ctgggctagg acagtgaagg 1980
acttggagtg gaatcagacg tggggaaggc gacagcgatg cttagctgtg gtttctgtat 2040
acccagcaac gtgagagcaa cctgataggg cagttgttct cagccgggcg actttgcaca 2100
atgattgtca cagcttgtgg ggaggggggtt gctactggca ccccggtgggt agaggtcagg 2160
gaggcttctg aacatcccac agtacacagg acggcccca gaatagagtt gccagctca 2220
ggtgtcaaga gtgcccagga gaaagcctgt aatccaggca caagcaaagc gtgccaggtg 2280
catgggagga gtggggagca ggggtgggagg ggcccagatg cctaaggagg gaagggtgac 2340
tgcaactggg taggctggag gagcccaggg gaaggagagg atgtggggac tgtaggtac 2400
aagagagcaa gaaggtgagg ggggcctggc acagtggctc atgcctgtaa tcccagcact 2460
tcaggaggcc gaggcaagca gatcatttgg ggtcgggagt tcgagaccag cctggacaac 2520
atggtgaaac cctgtctcta ctaaaaacag aaaaattagc cgggcgtgggt ggtgcgtgtc 2580
tgtaatcca gctactgggg aggctgaggc aggagaatca cttgaacctg ggatggtgag 2640
gggctgttgg gctggctccg tcgcagaggg gagatgggaa aggctgacaa ctgtgcccac 2700
ccccagggtat tattcaggcc tgccgggcac tcatgatcac cgccatcctc ctgggcttcc 2760
tcggcctctt gctaggcata gcgggcctgc gctgcaccaa cattgggggc ctggagctct 2820
ccaggaaagc caagctggcg gccaccgcag gggccctcca cattctggcc ggtaactggg 2880
ggaaggtgat ggggcggggg tccccctcaa ccgcagactt caggctgctt tgtcctcatc 2940

taatctcctc tccaattccc actcctcatg ctcacctccc ctaccctgct gcatggacac 3000
 ctgctcaccc ctgcctcatc tgtactcccc agatctcctg gctgcaaatac agcccatcgg 3060
 cagtgtttct tgagctccca gtaggggctg gccacggcca ggtgtgggag ggacttcgaa 3120
 gataagagtg agcggctgcc tccgggagct tacatcctag ctggggagca gagttagggt 3180
 gcacgctatg gcgcacacac acagtgcacg tccacagtgc cataccacgg ggcattggtg 3240
 ctcatgcctg taatcccagc actttggtag gctgagggtg gtggattact tgaggtcagg 3300
 agttcaaaac cagcctggcc aacatggtga aaccctgtct ctactaaaaa tacc 3354

<210> 314

<211> 3815

<212> DNA

<213> Homo sapiens

<400> 314

cttctactca ctgcttctc tccacaactt tatgactcag tgaaaccttc acactctctc 60
 atctgaaata tttccatttt ccatcatgtt cccatcagcc tgcactctc gactcagtga 120
 aaccctccct ccctctcatc tgaaatatTTT ccattttcca tgtttccatc agcctgcact 180
 cctcgactca gtgaaacct cactctctct catctgaaat atttccattt tccatcatgt 240
 ttccatcagc ctgcactcct ctcacttccc gttatcttgt tcgcttccac actaatatct 300
 ctaaacaggt aactgtgttc ctcaaggact taaaagcact taacaacagc ttaaaactta 360
 ggttctcact ctttagcaag gacttgaaga cttttaatga ttcagctcct gttcacaaat 420
 ctaaccactt tttcccat caaccctgaa cagaagctaa gtccactca tatacaaaat 480
 ctttcaattt tcctgaataa aaaagattat gtagccatca cccataatct gactccagaa 540
 ctctgtttct gcaccttct gtcaaactca taataagtct ccatattagt ctattctcat 600
 gctgctaata tggacatgcc caaggctggg taatttataa agaaaaataa gtttaatgga 660
 ctcacagttc cacatggctg gggagacctc acaatcatgg cagaaggcaa agatcaggtc 720
 ttacacggca gcagacgaga gagcatgtgt aggggaactt cctccatac aaccatcaga 780
 tctcatgaga cttattcact atcataagaa caacacagtc ctcatgattc aattacctcc 840

ccccagggttc ctcccacaat atgtgggaat tatgggaaca acaattcgag atttgggtga 900
ggacacagcc aaaccatata agtctcataa taaggaccaa aggccaagcc ttccctaagt 960
cgtccttaag agactcatgc agatttcata atttgcctcc agttgggcct tttctcaaga 1020
ccttgacatt ctgatctaga ctcagatggc tttgtggctc attatgaaac ccatctgtgt 1080
tcttacgcta gactcagtaa gatagctact ctttcatcaa ttcgtgtcat tatttattaa 1140
ttctttgcat aactggactt caaaatagga ttttaaaaaa agttttgacc gtgtgctctt 1200
cacaatgaag atcactaggc atttgttatg tgattctttc tttcctatca tatgggagaa 1260
aatagcattg ggctgtgtgc cctgagaggg agggcacatt tagatatattt aggagtgtga 1320
aatagaagac caaacatcag agagagagac tttgcttcac ctgtagttca aatatttagt 1380
taggacaggc gcagtggctc atgcctgtaa ttccagcact ttgggaggtt gaggcaggtg 1440
gatcacttgg gctcatgagt tcaagacaag cctgagcaac atggtgaaac tctgtctcta 1500
caaaaaatag aaaaactagc caggcatggt gatgcacggt attatgaggt tgcacttcac 1560
tgaaaaacca aagttgttta gcacttccat gtgaaccaca ccatctcaca agtatgaggt 1620
gtagcagaag tccagtccca aggacacaaa gaagacacac catgttaatg gaatgacata 1680
ctgcagtgtg tctagataaa cgatcctggg ccttgatgag agagatagat gcagtcttga 1740
aggaactgat tatgcagtga ttctgcattt aaatatttga cctaatttta gtaacaaaaa 1800
tgtatgcacc tttcattttc aaagtgcagt tgttctcag tatccgtggg aaatcagctc 1860
cagaataccc ccacagacac caaaaaccac tgatgctcaa gtcttatata aaacggtatt 1920
ttgcatataa cccatgctta tccttccata tgcagtcatg tgtctcataa tgaccatttt 1980
aatcaataat gaaccatgta tattaccatg gtcccctaag attataaaca catgtagaaa 2040
ccttcttgcg ggaagtcaga gaccccaaat ggagggactg gctggaaccg tggcagaaga 2100
acataaatg tgaagatttc atggacattt attagttccc aaaattaata cttttataat 2160
ttcttatgcc tgtcttactt taatctccta atcccgatc cttcataagc tgaggatgta 2220
tgtgcctca agaccctgtg atgattgcgt taactgtata aattgtttgt aaaacatgtg 2280
tgttcaaaca atatcaaata tgattgtaaa acatgggtgt ttgaacaata tgaaatccgt 2340
gcaccctgaa aaagaacaga ataacagcga ttttcaggga atgagggaag ataaccataa 2400
gatctgactg cctgcagggt tgggcagaat acagccatgt ttttcttctt gcagagggcc 2460
tacagatgga cgtgtgagta agagaatata actgaattct tttcccagca aggaatatta 2520
ataattaata tcctgggaaa ggaatgcatt cctgggggta ggtctataga cggccgctct 2580

gggagtgtct gtcttatgtg gttgaaataa gtactgaaat acaccctggt ctctgcagt 2640
accctcaggc ttgctaggat tgggaaattc cagcctgggtg aattctagtc agactgggttc 2700
tctgtctcttg aaccttgttt cctgttaaga tgtttatcaa gacaatgtgt gcacagcggg 2760
acacagaccc tcatcagtgg ttctaatttt gccttcacct tgtgatcttt atggctcttt 2820
gaagcatgtg atgcttgtga cctactccct gttcgtacat cccctcccct ttcaaaatcc 2880
ctaataaaaa ctggctgggt ttgtagctca aggtcgccat catagtccta ccaatgtgat 2940
ggcaccccca gaggccaagc tgtaaaattt ctttgtactc tttatttctc agaccagcca 3000
acacttaggg aaaatagaaa gaacctacat tgaaatattg ggggctgggt cccccaataa 3060
aacctcatat gtgggacttg atactagcac tgcagatcaa gtagggaaag tgactgatat 3120
tcaatgatgg tgctagaaca tatggtttct cctatgaaaa aacataaaca tatacaccat 3180
ctagggttat gtaactacac tttatgatgt tcacaaaaca aaaatattgc ttagtaagca 3240
tgtctcagaa catacacatg tcattaagcc atgcatgact gtactttata tcatctctgg 3300
aacacttcgg tcaatcaaga aaaatgacca agacaaatct caatcacttt aggaggttta 3360
tttgccaacg ttaaggatgc acaccagaa gacaggtcta tgcttttctt caaaaatgat 3420
tatgagggtt ccaaatttaa aggggaaagg gtgaaatatt gagaaataca gttttcatgt 3480
aagactgggg taaggggaaa acattcattg atacggtttg gctctgtgtc cccacccaaa 3540
tctcaccata aattgcaata atccccatgt gtcaagggtg ggaccaggtg gaagtaattg 3600
gaccatgggg gcagtttcct ctatgctgtt ctcatgataa tgagtcacat gagatctgat 3660
ggttttataa atgtctgaca tttcactcat tgtctgcttg cactcattgt ctctcctgcc 3720
accctgtgaa gaggtgctct ctgccattat tgtaagtttc ctgaggcctc cccagccatg 3780
cagagctgtg agtcaattaa acctctttcc tttat 3815

<210> 315

<211> 3983

<212> DNA

<213> Homo sapiens

<400> 315

aaagggagaa agaaagcgtg cgacagggag tgggagcccc aagtcaagag gagccccaca 60
gaggcagccc tggacttcgg gaccacagag gtgctgagtg ctgcccgatt ctggatccca 120
ctctgcttag ctcagaactt tgtcagcgag caagaacaat gccaggaggt ctggagaaaa 180
cgtgtcatca gtgcatttct aaaatcgcca gcaatgggtg ctctcctgtt gtacgactcc 240
accaggatga ggcggctgct gtccaaggcc gtggtgattg atgacgatga cgatgacgaa 300
tacccttggg ggcagaatgc gcacagatac tacatccacc tcctgctgag cctcttcctc 360
ttcctctggt tcctcctggg aaactactgg gtcttttctg tgtacctgcc tgattttctt 420
ccccctttcc agcagcctca ggactactgt gacaaaaccc tgtacctctt tgcagtcgga 480
gtcctggcgc tcagtcacac tgtgctggtc ttgctcctgc tgtgcagcgg ctgtgtctac 540
ctgtgctcca ggtggagact tgctgccgat gaagactgac agctgccttg tccagcatac 600
catgtatgca tatgcgtgtg catgcacgcg cgtgcacaca gacacacaga cgcacacaca 660
cacacacaca cacacaggtt cagagaaggg cataaaggta ataaaacctt ccctgaaggc 720
atttaaaaag ccacccaaag gcactgaata taatagcaga ctaaagaaac tcttgccctc 780
ctagacatgg ggaaatcact tctgctcttt tcagagtggg aattttgttc tcacaagagt 840
tttcaaaggg ataattgttt ttgagggtat gaagtgtggg aggcaaagaa tgggagacct 900
tttcaaatca tagtgcaatt tcaatgactg gtgcaagagc aaggttgggt gttgctactg 960
ctgctgtcat tcagccatgg tcaccttgaa gttatagaaa gtgcacagac tttcacacaa 1020
gatatatctt aacttcactc gctatgatgg cttttgttat taaaaggaaa aagatattct 1080
tttagtgact ctagctgcct tttgggaaag tgaaggagca gtctcttcca gccctatata 1140
agataggttt gacgtgatgg gtggaacatc ccaaggtcag ctataaaatc taacaacgtc 1200
aaagcagtag cttccacata gggggcgggc tggcctgcta caggcattgc ggagtgcagc 1260
gccgtgtgca ccgtgtgccg ctgctgcaag ttctttgctt ggccttgagt ctgtctctgc 1320
ctctggctat tcaagtacct ctctatgata tgcggctggc tgggtggcat aaaccagttt 1380
tgtatgtttc tggacaggtt gcatgagttg ggggtccgctc agtgtagctg tttttggttt 1440
ctgagcttaa atatacgaata atagctctc aacctaatga ccagttaggc tttggaagcc 1500
ttttgtaaata tgagatgtct ggaagtccag gatgacaccg aacagtgacc actaaccttc 1560
cctctggctg ccgctgttga gagatgaagt ccaggctctgt tgtcagtgtc cgctggggag 1620
cctctttatg agcaaaaagt cccatgtttt agaattttgt atgaagatac tgtcatgagt 1680
gtttctaggg cagtgccag ggggtgcgtgg cacctgctta accgtgcttc tctcagccac 1740

gtgcatagca tttctgtata tttaacacact gctgagctgt gtttattttt taactttgtt 1800
atgttttcgt gctttctcat caaaccaatc cctgagtggc catgaatgga ggcacctccc 1860
ttcatcagaa gtgtcagctc aaaccaagag gctcattctt ctccgtagct ttaagagaaa 1920
ggccccgtga gtcccatggg gtcttcccat ttcagtttag aagcactccc cgggcagtca 1980
ccgttagtcc ccttttctc ccaggtgaga agaaagtgct tgggtgtgcca tctgctggac 2040
aaaggaagaa cagccctttt tttgccctg tccctaaggg cagtttctgt tttcattttc 2100
acttgagcca tggcagaaga ccagcgggtg tgcagtttgc agatcctacc tcacctatga 2160
tgcccaattc catcctcact gtgtcccacg ttgccctctc tgtgttgggg actggggaga 2220
gtctgtgggc tatgatactg ggggtggacag gagttccatg ggctcctctc ccacctcct 2280
ttccccagtc catgactcgt cagccattcc cagtcactta gccaatgctt ggacatctgt 2340
gagcagcaaa gacctgggcc cagggacacc tgcattgactc ccacatgaaa gcctctgagg 2400
cttctgttgc gagggccttg gcaaaggcgg aaagagctgt gaacaacat gggcatgaag 2460
atttctgtta gcagatggca ggtactgggt agtgctttgg atacatcagt agctaggtct 2520
caaacgttgg acattcccag tttctggtag gcatgagtat caccagagtg ttgcagaaat 2580
ctttcccaga gggagtgggt gatgaagtgt gctcattctc atatgcacc caccagccca 2640
ccccagttg caatggagaa tactgggtcat aggtcctaaa taattgctaa aatctggact 2700
atatttttag ctttgagttt tcttgtcacc aaagcagtaa ggaagagggtg atgatctctt 2760
tgtataggtc atacatcttc cctgggttga gggttacagt agctatgatt gcaccactgc 2820
actctactct ggggtgacaga atgagacccc atctctaaaa aacaaaatta ccccttctg 2880
gggaaacagg ttagatccta aagaaaatgt tcatgtgcat ccattcatag aggggacact 2940
gaatggttca gtgggtgaca tcttcaagcg cagcaggctt tgaatgataa ctgattaagg 3000
cctccctcag gagatgggtga gatgggttatg ataaggcaca tttcaagaaa gaggtctctg 3060
ggctaagtaa ggcaaatggt ctataactgt ggttctttga agtctggctt aatccaggga 3120
tgacaccag actgtctagg aagggtgag ctgcgtgccc ttaagtgat cacctcttag 3180
tataatttca ctgagctgga ggtgagtgt agaagttcct gggtatagaa gaagttataa 3240
tccttggcat ggcctgaagt aggcagtcca cactgatatg aatgtgctg tgtatacctg 3300
gagaatgaaa atgcccactt aagactggcc caagagctgg gcagccttc tccatgggaa 3360
cctggcaagg caatgggaag tggacatggg aacacctgaa ctttctggat gctatgaaac 3420
ctcaagggaa caaattatgt ggcagagagg gataatctgt tcttcccatc tgagaaaaga 3480

ctgcagcaaa gataaactat atgttgagat cattttatit gctacatcgg gcatcattct 3540
aaaaaccatt ctttgcctga atctatataa atgacagttg aaagcagtaa aagtgggact 3600
gtttcactgg agtcagccac actagtgggt ctcaaatctt ggtgaaccct gagagctacc 3660
caaggacttg ttgcaatgc agaatcacag cccccagaga ctgacttgtg gggcccagct 3720
ggttctgatt cgggtggccag agaaaccgca tgtgtgcact cgggccacac atacagcctg 3780
gactggctta tgtcaggccc atcctgggtg tcacatgag gacaatataa tgtcacttcc 3840
agtacttcgt gttatttcct tctcttttag tatgagaagt ggccaagtgg tcaatagctt 3900
tcatctttgt gtaactgaat cttgtgttc atttccttct gggcattttt cattgttgat 3960
gaaataaact ttgttcaatt tgt 3983

<210> 316

<211> 3242

<212> DNA

<213> Homo sapiens

<400> 316

gtgctcgtgc catgtgcctg tcagttctgc aagcatttgt tggatgtgaa ggttggtgtg 60
atgaccacgc tgcccacaac aggcaaaagg gtgcggacag ctgaggctcc tcaattcccg 120
ctccaaagct cagaacctcc ctccctcct ggatccaaca gaagcagcgg ccgctgctgc 180
ctgtgcctct caaacttgtc acccacggat gctgggaaaa atgcacataa aatgactgga 240
tggagatgac ccaggaaggg gccctgttgc ccaggaaatg ggcttgtcct gaaccacagc 300
ttgaaggaga gccaccgact gatcaggaat acccaactgg actttattcc agcaacatac 360
aaagcattac tgtgctgggc catggtatat tcttgggttt cttttattag aacacttggc 420
attacattca ctaatataca ctcatcatag tagacatttt cactagtat agatgatatg 480
cactattttc ctttctgaaa cagaaatttg cagcagcact gccaaaggac aatagatttt 540
taaaaatcat agaatgactg gagttcatgt ctctgcaaag aacatctaag ccctaagcca 600
tccagagtgg atgaggcatc tctgcatgag ttaaattaca cactccagct gctgtaacca 660
agaaggagtt tcacagtggc caaaacgtcg tagaagtta gttctcatgc atgtaacagt 720

ccaaacgcag ctccacagt gcaaggagcc agcgtccttt ctcttgctgt cctgctgtgc 780
tcaagagggtg gcttctgtct ttgagtccaa cgtggctgct ctggccccag ccatcatttc 840
tatactccag caggtggcaa gtgggaagaa gaaagggagg gcttatgcct ttcattttag 900
ggacacatgg cctagtgtg ctacatcac cctgctcacc ttgtgttggg accagagtct 960
agtcacatgg cagcaaata ctgtgaggaa tattgggaaa ggttgtcttt ggctacttgg 1020
cctcatgacc atcggaaact gctgtactac aaaagggtggg ttctgatcat cttagtgtgg 1080
aatgctgtga caaatgacca tagcctgggg gcttaaacia caaacattta tttcacacag 1140
tcctggaggc tggagatcca agatcaaaat gctggctggc ttggtgtctg gtgagggtct 1200
gcagacagcc acttgttgta tcctcaaatg gtagagagag agagagaaag acagagagag 1260
acagagagag gcagagagag agagagggag caagctctct tgagcctctt atcagggcac 1320
taatcccatc ttgaggggtc cccctcatg gcctaataa tcctctcca aacgcctcaa 1380
ctcccaacac catcatgttg tgggtgaggg tttcagcaca tgaatttgga ggggacacag 1440
acattcagtg tgcagaggct gccactgtgc ctctctgtcc ccatcccttt cctgacacct 1500
tagagtgtgt gtccccacag gcaagcaatg tccttcagca tctcttcca ggagcccctg 1560
agcaccgct tccctctac tttattactg ctctatcca tacaggtttg ggcaggagaa 1620
caggagccac actcagtatt tagaggaaag agagacagag agcacaagtg agagagattg 1680
acttaatacca ggaaatcaga ggctcacaca gacattggaa gggagcgggtg aaggctcagt 1740
ttaggaaacc cagaagtga gagatgacga ggaagccccg aaatgcccct ggaagcccgc 1800
agtgccagt gagccattcc cagggaacgc ctgggaacca ccagaggctg acaagcctgg 1860
aaccactggg ggaggggacc tgggaaactg gggagaacat ggagggtgac ggatgacgct 1920
gagttggaac ggacaacca atgcaggctt cctctcctcg cttctcagcc cagcagggtg 1980
gctggctcat ttgtgggatt tatcaccac taagggtttt cagggggttg aaaatggctc 2040
attatccctc ctagataatg ttgcctctta gtagaggatt tgatgctttg acccagacat 2100
gattcctcct gtgggcatga aaatatatat ttttctttt caacttttag tctaagttcc 2160
agggtccatg tgcaggatgt gcaggtttgt tacataggca gatgtgtgcc atgggtggtt 2220
gctttgaagc agagactggg ggggtgcgtg caaggccagc tccgccctgc tccagcctct 2280
cctggctctg cccctgccc tccactcagc acttggtttc tgcagtcacc tcccctctcc 2340
ggctctctcg ggtatggccc ctctctgggt cactcccatc agcattcatc ctctctcca 2400
ggcatgggag gtctccgtga ccccatgccc ctgagcaccg ctgccctatt tctctgtgcc 2460

ctttctctgg accctatttc tctggtcctt tttgcggcca gagtcctcag aagagctggc 2520
 tgcccaccgc ctctcctccc gcccctctgc tgaggctgta tcgtgaccac cccaccccc 2580
 tgccacatca catcaggggg cctgccctct gtccctcctt tctgtttcct cttcgttgct 2640
 tttctcacgc ttggcccttc atcccttctc tcttgggctc cccggacctc ctgcgcatgg 2700
 gtttctttct gccctgtct ctttccttgc attcttgtcc tcttctcggc attctgtttt 2760
 cagtctgtcc ctctgccatg tgactgtcca gtacacgtga gtacatggga tatgttcccc 2820
 aaaccatgga ggctgggctt agccatgtga cctgctttgg ccaaggatgt tttgacagca 2880
 ctgcacaagc agaggtctca gctgtgcttc tgcggcggcg gggctcccc ccggggctcc 2940
 tgtcacctgt ctggggagaa cgtgctccag gcgcggccct tccagagagt gtggaatccc 3000
 cggggaagcc cagatgatcc acagccagac gctggctgag gttgagaaac tggcacttgt 3060
 tgatgtcagc caccgagttt ggagttttgg agtggcttgt cagacagcag cattgttagca 3120
 atggccgaat catccatgaa gacgctgaat ttcatttttg tttttgtta cggcagcata 3180
 actttgctga tctggtctgt gacaaaataa ctttttctc tgtcagtctt tctcttttca 3240
 tt 3242

<210> 317

<211> 3238

<212> DNA

<213> Homo sapiens

<400> 317

cagaacactg gtcagagaaa tgggaggcat gcattctagt cctgattttg ccattaattt 60
 gccacatgac tttgaagaag ttacttatct tctctgtgcc tcggtttatg catctataca 120
 gaggaataa catttgtcct tccaggatgg ctgtaagggt aaagggggat gatgtatgtg 180
 aaagtgtttt ggaaagcaca gagcactgta taaaaggtag tcaaggtggg aatagtacta 240
 ccaactctcc ctagtgttcc ctttccccac tttgtgttcc tccatcaaag ggaaaaccca 300
 acccctttga ttcctgatct catgagcaca aataacttcc tcagttctca ggggtctgtac 360
 ctcaatatgc ctataatcca ttccaggact aacgggtgctt cctcttctg ccctttcagc 420

tgtgctgctt ttggcattca cctatgagga gcgggttgga gtgggacatg ggaatggcct 480
ttcctgagta actccttccc atttgctcct cagagcatag agcctctgga cccagtgag 540
aaggctaaca aagtcttggc cagaatcttc aaagagacag agctaaggaa gcttaaagtg 600
cttggctcgg gtgtctttgg aactgtgcac aaaggagtgt ggatccctga gggatgaatca 660
atcaagattc cagtctgcat taaagtcatt gaggacaaga gtggacggca gagttttcaa 720
gctgtgacag atcatatgct ggccattggc agcctggacc atgcccacat tgtaaggctg 780
ctgggactat gcccagggtc atctctgcag cttgtcactc aatatttgcc tctgggttct 840
ctgctggatc atgtgagaca acaccggggg gcaactggggc cacagctgct gctcaactgg 900
ggagtacaaa ttgccaaggg aatgtactac cttgaggaac atggtatggt gcatagaaac 960
ctggctgccc gaaacgtgct actcaagtca cccagtcagg ttcaggtggc agattttggt 1020
gtggctgacc tgctgcctcc tgatgataag cagctgctat acagtgaggc caagactcca 1080
attaagtgga tggcccttga gagtatccac tttgggaaat acacacacca gagtgatgtc 1140
tggagctatg gtgtgacagt ttgggagttg atgaccttcg gggcagagcc ctatgcaggg 1200
ctacgattgg ctgaagtacc agacctgcta gagaaggggg agcggttggc acagccccag 1260
atctgcacaa ttgatgtcta catggtgatg gtcaagtgtt ggatgattga tgagaacatt 1320
cgcccaacct ttaaagaact agccaatgag ttcaccagga tggcccgaga cccaccacgg 1380
tatctgggtca taaagagaga gagtgggcct ggaatagccc ctgggccaga gccccatggt 1440
ctgacaaaca agaagctaga ggaagtagag ctggagccag aactagacct agacctagac 1500
ttggaagcag aggaggacaa cctggcaacc accacactgg gctccgcct cagcctacca 1560
gttggaaacac ttaatcggcc acgtgggagc cagagccttt taagtccatc atctggatac 1620
atgccccatga accagggtaa tcttggggag tcttgccagg agtctgcagt ttctgggagc 1680
agtgaacggt gccccgtcc agtctctcta cacccaatgc cacggggatg cctggcatca 1740
gagtcatcag aggggcatgt aacaggctct gaggctgagc tccaggagaa agtgtcaatg 1800
tgtagaagcc ggagcaggag ccggagccca cggccacgcg gagatagcgc ctaccattcc 1860
cagcgccaca gtctgctgac tctgtttacc ccactctccc caccggggtt agaggaagag 1920
gatgtcaacg gttatgtcat gccagataca cacctcaaag gtactccctc ctcccgggaa 1980
ggcacccttt cttcagtggg tctcagttct gtcctgggta ctgaagaaga agatgaagat 2040
gaggagtatg aatacatgaa ccggaggagg aggcacagtc cacctcatcc ccctaggcca 2100
agttcccttg aggagctggg ttatgagtag atggatgtgg ggtcagacct cagtgcctct 2160

ctgggcagca cacagagttg cccactccac ccigtaccca tcatgcccac tgcaggcaca 2220
actccagatg aagactatga atatatgaat cggcaacgag atggaggtgg tcctgggggt 2280
gattatgcag ccatgggggc ctgcccagca tctgagcaag ggtatgaaga gatgagagct 2340
tttcaggggc ctggacatca ggcccccat gtccattatg cccgcctaaa aactctacgt 2400
agcttagagg ctacagactc tgcctttgat aaccctgatt actggcatag caggcttttc 2460
cccaaggcta atgcccaggg aacgtaactc ctgctccctg tggcactcag ggagcattta 2520
atggcagcta gtgcctttag aggggtaccgt cttctcccta ttccctctct ctcccaggctc 2580
ccagccccctt ttccccagtc ccagacaatt ccattcaatc tttggaggct tttaaacatt 2640
ttgacacaaa attcttatgg tatgtagcca gctgtgact ttcttctctt tccaacccc 2700
aggaaagggtt ttccttattt tgtgtgcttt ccagtccca ttcctcagct tcttcacagg 2760
cactcctgga gatatgaagg attactctcc atatcccttc ctctcaggct cttgactact 2820
tggaactagg ctcttatgtg tgcctttgtt tcccatcaga ctgtcaagaa gaggaaaggg 2880
aggaaaccta gcagaggaaa gtgtaatttt ggtttatgac tcttaacccc ctagaaagac 2940
agaagctaaa aatctgtgaa gaaagagggt aggagtagat attgattact atcataattc 3000
agcacttaac tatgagccag gcatacact aaacttcacc tacattatct cacttagtcc 3060
tttatcatcc ttaaaacaat tctgtgacat acatattatc tcattttaca caaagggag 3120
tcgggcatgg tggctcatgc ctgtaatctc agcactttgg gaggctgagg cagaaggatt 3180
acctgaggca aggagtttga gaccagctta gccaacatag taagaccccc atctcttt 3238

<210> 318

<211> 3795

<212> DNA

<213> Homo sapiens

<400> 318

ctctcatgtg atacgtgaga acacttaacc ttagcgaagt tgggagactt gaatctcaca 60
gttccaggag gagctaggat tcaaaccag agcccatgcc aagcagaaag aatgtttatg 120
aacagagaac cccacactcc aattcccaaa tggggccatg agcccaggga aggtgaaggt 180

cttctcttgg gctacacttt tttggtggag ctagaactag agttcagagt gtatgacgcc 240
agcctgaata tgtgcaactgc cccattggcc tcttttctga cttgctgcca acttacctga 300
tgccgaggac tgttgtgtgt taggaggaaa tcaagtgtca cgagccagtg ggcaggaaag 360
gaggcccaag acagctcagt taaggaggca ctccctgatg aggcaagctg tgaagcagtg 420
atgggcatga gtctcttgtc ctccctgagcc tcagtttctt caccctcaaa atggggataa 480
tgatttcttc cgatagatat tgttatgggg atgaaaagca atgcccctgg tgagagctcc 540
tgaagtgggtg tagcccccac ctggacttgg tggacgttgg ctcccctctc gctccctgtt 600
ccccacattc tctgggaaat ggcagagaag gcatctgtgg agccattgct gcacagtgtc 660
tagaacagtg tcctatggct gctgtaacaa atgcccacaa actaggtggc tgaaaacaac 720
agaaatgtat tctctacca ttccagaggc cagatgtccc acatcaaggt gtcagcagga 780
ctgtactccc tacagatgct ctaggagaaa acccattcct tgcctcttct gggggttgcc 840
ggctcccgtg gctggtggcc acatcactcc agtctctgcc tccagggtca cacaccttct 900
cccctgtgtg tctctgtaat cttacctctc tcccacaagg acactcatga tggcatccag 960
gatccacctg gataatccag ggtaatctca tctccaaatc cttagcttaa ccacatctgc 1020
aaggaccctt ttccaaataa gggaataatt gcagggggcca gggctgagga catgggtgta 1080
tcttttcggg accaccattc atgccactgc agaaccaca tgttggggac cctggctcac 1140
cacctccctc tgttctact aggaggccaa ctgcaaaaac cacagagtga accgggtggt 1200
gttcttgggg aacatgaagc ggctcctcac gacaggggtc tccaggtgga acacaagaca 1260
gattgccctc tgggaccagg aggacctctc catgcccctg atcgaagagg aaattgatgg 1320
gctctctggc ctccgttcc cttctatga tgctgacacc cacatgctct acctggctgg 1380
aaagggtgat ggaaacatcc ggtactacga gatcagcact gagaagccct acctgagtta 1440
cctcatggag ttccgtccc cagccccgca gaaaggccta ggggtcatgc ccaagcacgg 1500
gctggatgtg tcagcctgcg aggtgttccg cttctacaag ctggtgactc tcaaggcct 1560
gatcgagccc atctccatga tcgtgccccg gaggtcagat tcctaccagg aagacattta 1620
cccaatgaca ccaggcacgg agccagcact gaccccggat gaatggctgg gaggcacaa 1680
ccgagatccc gtgctgatgt ctttgaaaga aggtataag aagtcctcaa aaatgggtatt 1740
taaggctccc atcaaagaaa agaagagtgt tgtggtcaac ggaatagatt tattagaaaa 1800
tgtcccaccc aggacagaga atgagctcct tcgaatgttc ttccggcagc aggatgagat 1860
tcgacggttg aaagaggagc tggcccagaa ggacatccgc attcggcagc tccagctgga 1920

actgaaaaac ttgcgcaaca gcccgaagaa ctgttagctc cccagctggg ctgttttcta 1980
agccgatctc tccgtcgttt ctactcatcc ctttaacttct cccttaccag tgaccccaga 2040
gacagagcca ggacaggagt gggggccagc ctgaggaccc ccgcctacca cctcgagaac 2100
tggaagccaa cctctaacct cctgacctca tgctaataaa agtccccagc ttctggagac 2160
cccctgccgg cagccccctt ccctgccacc ccaggagcca ggcttcccct cagctgggtg 2220
aagactacag actccctggg gttggcaggg gctccatctc agtggaccag gaagcaagag 2280
gggaagcggg atcccagcta gacttagaac ttggactttt cccctgtgaa gggggctgcc 2340
aggacatctc agcactcccg cctggagctc tcagcatcac tgaaggtacc acagtgtaa 2400
tgctggactg caggctgcag tgatccctct ttcgtccac cccctcttcc ctcagcagcc 2460
ccggaagcct gcctcacccg acgaggacag cgagcggccc ggctccttcc tgtctcttcc 2520
cttccccccc tcttgtcttc aggggaattca gaggattgct ctccaaggcc ataatgacc 2580
cttgccttcc ccatgattct cttcaaagct cttgcacacc cttttcccat tcaatttgtg 2640
agccaggcag ggtagggatt agtgtcccc tttgacaaat gacagaactg agggttgcaa 2700
tggggaaatg acttataaag tcaccagca ggtcaacaat gggccacga ccaagaccct 2760
gggtgttcag accccaaggc cagggccttt cccgctgcat caagatgcca atccctttgt 2820
gggcttcacc agtgcccaag tctctatgga gaatgagaac tggaagccac tgctaccgtc 2880
taccagcac cagtagtgcc gatgtgccac actgccagtg tgaggccct cagctctgt 2940
gcccctagat ccttcaggtc cccacctca gctgtcacca ccacctccc caggggactc 3000
catctgagat gaggcctcgt cctcctggaa gctgaggctg agaagggtgg agcttggccc 3060
tggggaaggc agaccagggt ctgatggctt ctagggatgc tctgcgtgtg tctcagcacc 3120
gctatctcag ccactttcag ccttatgcac gtagaatgac cacagccact cgcacccgta 3180
tagcacttta aagtttctgc agtcctttga cacataggat ctcattggagc ctcacgtcta 3240
ctcccttctg cagatgagga aaccgagaga agtggcccaa ggtcacgcaa ctctgagatg 3300
ccacatttca ttgatcttg tacacatttt cttttattcc ttcttttttc ctcctttcat 3360
ttcccactac gcacaaagag ttataaaca ctgttctcag aagagtcaca gtttgggggtg 3420
agatctggaa atcaagaaat ggggtgtccac tcttttcttt cattagctag gatctactag 3480
atgcattata ctccatacct gcttttccca tggccgccct acggaaaatc ccatccacag 3540
aggccagggc taccaagcc cctccagggtg agctgggcct ttcctttatg aacctccatc 3600
ctcccagcca gctacagtag ggcctcctca ccccgtaacc cacagctaga cagtgtcagc 3660

actcatctcc tcctcccaca tttctggagc tttttttttt ccttcccat tgacctttgt 3720
ggctcttctgt gattatttat gctgcctccc aaggatagaa ttgaaataaa atgttttcaa 3780
cttaaaaaaa aaaag 3795

<210> 319

<211> 3316

<212> DNA

<213> Homo sapiens

<400> 319

attccacgcg gctcgagccc gcgtgcgggc ctctttcagg ccgctcctag tggacgcaga 60
ggcgggcca ggacgtgca gagaaagtac cctgggccat gcagctgcac tcccctccca 120
ggaaaggggc aggatggctg cccagatgag tgaggcatca gccctggccc cccaggtctt 180
cccagatcca ctggaactga tgggtgccagc ccccaggccc caagaggagc tgggtcccag 240
gacagaggag ggagaggagc aagaggctcc cctgggcccc ttccaggccc cacctccagg 300
gatctgggct gcacagccac cccatgcctt ggaccacctg gtctgacctg cacagaggcc 360
tgggtgtggac attgcctggg taacagccac tgagatcctc cagcctggac atgtgtccca 420
tactgtgtgg actaccagg gatccggcca ggggtggagt ggtgaggcag acatagctgt 480
gtttgggtca ggcggtgtcc tccagccttc aggaatggag acgggtccat cgtgttcctc 540
acaaactgga gtctccacct tcttgacact tggggcccca ccctgtgaag caaggagagg 600
agagtgggtgc cacagtaggg ccagtgcagg tcacaggcgc gagatggagt cccaagagg 660
gtggaccctg caggtggccc cagaggaagg ccaggtgtca cctggggccc agtgacagaa 720
gcagccatat tttatgagac gcagcccagc ctgtgggcag agtccgaatc actgctgaaa 780
cccttggcca atgtgacgt gacgtgccag gcccgcctgg agactccaga cttccagctg 840
ttcaagaatg ggggtggcca ggagcctgtg caccttgact cacctgccat caagcaccag 900
ttcctgctga cgggtgacac ccagggccgc taccgtgcc gctcgggctt gtccacagga 960
tggaaccagc tgagcaagct cctggagctg acaggggcaa agtccttgcc tgctccctgg 1020
ctctcgatgg cgccagtgtc ctggatcacc cccggcctga aaacaacagc agtgtgccga 1080

ggtgtgctgc ggggtgtgac ttttctgctg aggcgggagg gcgacatga gtttctggag 1140
gtgcctgagg cccaggagga tgtggaggcc acctttccag tccatcagcc tggcaactac 1200
agctgcagct accggaccga tggggaaggc gccctctctg agcccagcgc tactgtgacc 1260
attgaggagc tcgctgcacc accaccgcct gtgctgatgc accatggaga gtcctcccag 1320
gtcctgcacc ctggcaacaa ggtgaccctc acctgcgtgg ctcccctgag tggagtggac 1380
ttccagctac ggcgcgggga gaaagagctg ctgggtacca ggagcagcac cagcccagat 1440
cgcatcttct ttcacctgaa cgcggtggcc ctgggggatg gaggtcacta cacctgccgc 1500
taccggctgc atgacaacca aaacggctgg tccggggaca gcgcgccggt cgagctgatt 1560
ctgagcgatg agacgctgcc cgcgccggag ttctccccgg agccggagtc cggcagggcc 1620
ttgcggctgc ggtgcctggc gcccctggag ggcgcgcgct tcgccctggt gcgcgaggac 1680
aggggcgggc gccgcgtgca ccgtttccag agccccgctg ggaccgaggc gctcttcgag 1740
ctgcacaaca tttccgtggc tgactccgcc aactacagct gcgtctacgt ggacctgaag 1800
ccgcctttcg ggggctccgc gcccagcgag cgcttgagc tgcacgtgga cggtgagctg 1860
gcggggcacc agcgagggcg ggcgcgggtt cagtgcacct cggggcctcc tgtctttccc 1920
ctctttcctt gggcgtccga cggcggcgct ctgggccttg gttcagcccc catcgcctac 1980
cccggcgggg agcaggcgat cgggtggtcga ggggtctgggg acgcctggaa tttcggctta 2040
tttccacagg acgcaagccc gtaggtcacg ttagcgtgg tggtcggcag caggaggct 2100
ggccccagg tttcttgctc agatccctgc agctctgtgg ctgccttggt ttattactgg 2160
ccatgtcagt cgtcactatg gacccccgc cccggccccg gtcccgcagg cgcacggctg 2220
atgtgtcctt ctcccatcc ccgcgctcc cagctctggt tgtccctctg atttctcat 2280
cgacgtctcc aggactcaga gcccagcaga gcgtgagggc acaggtctga cctccagatc 2340
ttgaggctgt accctttgct gggagcaccg ttttctcttt tctttcactt tctttctttt 2400
ctttcctgcc tttttctc ttttttctt tcttttctt tctttcttc ttccttctt 2460
ctttctctct tttctttctt ctttttctt ctttctctct ctctcatctc tgcccccaa 2520
ccccatctct ctcttcatt cctccctttt cttctccttt ttgttttttt tttggataac 2580
ttacttttat tcttgaggc cggagtgcag tgggtgcagtc tcagctcact gcaactttcg 2640
ccttctgggt tcaggagaat tgctttaacc cgggaggtgg agtttgagt gagtccaggt 2700
catgccactg cattccagcc tgggcaacaa gagcaaaact ccatctcaaa aaaaaaaaaa 2760
agtttaatat ttaaattgta catctatata ctatgactcc aaattttatt tatcactctc 2820

cttaaagtct gaagaaaatg attaatTTac taagctccaa agacaacaca gtcccactga 2880
 cataacattt agtatgatgt cctactctcc tgTTagaatt aagaacagcc agtatcaaac 2940
 tggcctgaaa tctgattggg tTcctgggct cagaataact gtagtaaatt tgtaaATcca 3000
 cactaagaca caaaattaaa ctaggatgtg tatatctatc ttacaagaaa acgtttcaca 3060
 gtaaaaatta acattatgat tttaccaaAT ttcaacatta tagtttgtta atccaatcaa 3120
 gctttcaaaa tTcctgatta gcttacaatt aattgcaaAT aacttcatgt agtttggcta 3180
 gcatttcaaa atggataggg aatataactt ttaaaatgcg aaagtatatt atacatattg 3240
 cacttttctg ctaggctggg ctagtatctt ccatggcaag atactcaaac tattgaataa 3300
 aatacacatt taaatc 3316

<210> 320

<211> 1721

<212> DNA

<213> Homo sapiens

<400> 320

aaaaaaatgc tacaagatag catccaaaaa gcttttctag acattggctt aggccaagta 60
 gtcatgacta atgccccaaa agcaaacgca aaaatataaa aatagaataa gatcaatagg 120
 acctaATgaa accgaaaatc ttctgcaagg cagaagaaAT atcagcaggg taaacacaca 180
 acccacagta taggaaacag tagtcacaaa ctaggcatct gacaaaggac taatgtccag 240
 actccaaagg aactgaaaga aatcagcaag aagaaaaggT gccatttacc accttctga 300
 ctcatTggcc agaaccaatg ttagtggaat taacatatgc cccaccccaa gtgacttcta 360
 aagggctaac tcaccacaag ggagtcagag cagatcttgg actgagacct acaggacaca 420
 ggtactgctt tttctctttt atttgtttta aattttattt atgttttttag atcaaATagt 480
 tcagattgca ttggTTTTta atctgctgtt gttggattaa catatgcttt aagcgactct 540
 taaataggTg gctcaccagg agaaaggcat agcagaacct ggactgagac ctacgggaga 600
 caggTattgc tttttctctt ctaatcattt taaatttaAT ttaccatctt tcatcaaata 660
 gctccgatca tatcattatt tttttctttt ctgttttgTt ggtggTTTTa ttggTggagt 720

tttattttac tattttagaa aagcagtctt ttaaaaaaga cttttaaaaa gttttattac 780
 tctttttttt aaaaaaatta tgttttcctt tgatgtgctt atttccttta taaagatcat 840
 caccattaaa ttactaggag aactgcggc tgattttgtc atgcgtgaga taagaaattt 900
 ttgccaaag caattagtga tgagtgaat ggaaaaatcc gtgatgatct ttttaagatga 960
 ttaactttct aatccagaaa atgctgctgt ttgtactgaa caaaatagct ttatttttat 1020
 atgaccaggg gtacataaaa tgcttcaaaa caacacataa ttggcaaaa atactatgtc 1080
 ttgccagcca gaagaataag tgtggtttta tttctatgta tatgtctagt accatgcctg 1140
 cactagagtt gggaaatttt aaaaacatca cctattgata cagaagagaa gtgctgggaa 1200
 gggaagggca tggtcctttt gaatgataca gaaaaggatga aggaaagtga tgggtagagg 1260
 aggccgggggt ccctggctag ggctccaaac ctgagcttgt gcccctggac ctagatgagg 1320
 acaggcattt ttgttttcct gaccaaatgt tgcatttccc aagatcacc tggccacca 1380
 tgccctatcc tgtgcctaaa aaaaccctgg gaccctagca ggcagacaca caggaggttg 1440
 gacgtcgaga ggagcacatc agtgcaagaa cacatgggtg gctgccactt ctctcccttt 1500
 cctgagaggg aaaaactctc gacgtcgaga ggaatccacc aacaggcacc agcactctgg 1560
 caggccaccg accaatggat tgacatagag ttggctggg gcagccagag gagagcctgg 1620
 gccgctgaat aacccgactt caggggaaaa ctattctccc ttttggctcc cccatctgct 1680
 gagagctact tccactcaat aaaaccttgc actcattctc c 1721

<210> 321

<211> 2176

<212> DNA

<213> Homo sapiens

<400> 321

gatatcaagg gatagagtta gggtttctgt gggttttgtt ttgctgagg aaaggatgtg 60
 caggtcgata gctattgttt ctttccatt cctgtgattc tctttacatc tgtatatatc 120
 tatcacacca tgctgacttt gtgatgagtc ctgttcctca gaaacatcaa gctgggttcc 180
 ttttcaaaga aacacacaga tcatatttct ccatctcatt ttgttttcac agggagcttt 240

tcttatcaac aaagtcgcat gctttttttt ttggatataa tgtttatcac gtctggagag 300
ccataaacag taaatacaga ggatatcaat gcccagaata gtttagagtat tttgatgaaa 360
tcctatTTTT agataataaa tttcaagatg tgtctatagt gtattgttta aaacaactga 420
agacatttga gacgtacata aagtagacat ttttaattta gggaaactta tatgcccttt 480
tttaagaagc cattctaata aaataatctg actaattggc ccaaaataca ataagtatca 540
ctttctaaca gagaccaaag ggaagctgag aggctttcct tttatgtact accgttggat 600
cgctgcagcc gcctctcata acaccaaca gaacccggtg aggctctgtg ggcttcccg 660
ggccctcagg gaggctgcag agtcccctag tccatgtcag ggagccgcca tcccacatac 720
ctccaaagcc tgtcctcgcc tgcagttttt gcagagctcg cggttggagg tggaaattta 780
gaagccctgt gttgcaggag aggcagtagc acccccaggc agctcttggc agggacagac 840
cacccccgc ctcgctggta ttttagggtc ttttggattt ttgccactgt gtggggctag 900
gcggttggct ggaggacacg gtgtaggcct tgccgctgtc tgggttcctc gccactgcag 960
gagcagggt gtttctggaa aactgggct gctggtggcc cgtcaaactt ctcccacaaa 1020
ttctgaatcc gagaaagtga aggaaggatg gtggggaagt gaggaggcag gagcagaggc 1080
cacagggacc gaccagagat gcggtggaga cagaggagct tccttctcag gctgtttctg 1140
ggaagcctga gaggcggcca gcaccacct ccgctcactc tcccctcagc ctcttcgctt 1200
cccttctcaa ccctttctct cctcctcgcc tcttcccttt cttgctgtct tgttagtccc 1260
tgtcccaaaa ctctggctc ctttgttctg ctgccgtggc cccaccag gaggaggtct 1320
caggcaccat ccccccagc agggatccac acaacagggt catgctgggg ctgggggagc 1380
cccgtgggt tcctgatgcc ttgtgcacag ggagttgctg cagtcatttt tggactctcc 1440
tgaatgtgtc cacatgttct gacctccac cagaaggaac gctggtggcc acatctctag 1500
agatctatTT acttttttga gaccggctta tgagattggc taatttttgt atttttggta 1560
gagatgggggt ctcaccatgt tgcccaggct agtctcgaac tcctggcctc aagtgatctg 1620
cccaccccg cctcccagag tgctgggatt acaggcatga gccaccgcg tggcctctag 1680
agattcacac caaacaatat cactcctgcg ggaaccgcag acagatcaaa ccctggtgag 1740
aggaacactt tatttcccaa ctcatcatcc taagccaagg ttggagggat gagcattccc 1800
taaacaccaa ggcgagatca cctggtccca gtgcctcttt tcacacaggc ctagatttc 1860
tatctctctg cagtttatgc atcggtaaaa aaaaaaatct ctcccagtgt gcccgttag 1920
ttttcagcat tttgtaagca aaatgaactt aacacatagt aattctaatt gaaggtatgt 1980

acataaaaag catgatagaa tggcaatatt gtatcaatgg atgtacattt gtaatatttg 2040
taaaaaaaaa atccaaaacc ttaaaatatg aatttacata tgtaatttg cctctaagtt 2100
ctataaattg cacttcagtg atatctaata agtgaatgtt tctgttaagt aaataaaaat 2160
attcagtaaa attgtt 2176

<210> 322

<211> 3113

<212> DNA

<213> Homo sapiens

<400> 322

acttatagaa gcatcccaag cctcagccgg tctgcatctc catcggaag tgcgcttgcc 60
acatcccttc ggatcacttc gtcctcccga gagcggttctg ccttctacag ctcggaagaa 120
aagaaatctt agctgtgaag tgaccgtgga gaaagcgcag gaagcgacac aattggtttag 180
ggaggcagag agtgtgagcg ggcgcacccc ttgcctgggg accgcgctcg cgggcgggga 240
cggagcatcc cagtggctgc acccgccgtt ccgcgtcct gcctggcgtc gccaaccccg 300
cggcggccgc tggaattcca gagctgccag gcgctcccag ccggtctcgg caaacttttc 360
cccagcccac gtgctaacca agcggctcgc ttcccagacc cgggatggag caccgcgcct 420
agggaggccg cgccgcccga gacgtgcgca cggttcgtgg cggagagatg ctgatcgcg 480
tgaactgacc ggtgcggccc gggggtgagt ggcgagtctc cctctgagtc ctccccagca 540
gcgcggccgg cgccggctct ttgggcgaac cctccagttc ctagactttg agaggcgtct 600
ctccccgcc cgaccgcca gatgcagttt cgccttttct cctttgccct catcattctg 660
aactgcatgg attacagcca ctgccaaggc aaccgatgga gacgcagtaa gcgagctagt 720
tatgtatcaa atcccatttg caagggttgt ttgtcttgtt caaaggacaa tgggtgtagc 780
cgatgtcaac agaagttgtt ctctctcctt cgaagagaag ggatgcgcca gtatggagag 840
tgctgcatt cctgcccac cgggtactat ggacaccgag cccagatat gaacagatgt 900
gcaagatgca gaatagaaaa ctgtgattct tgcttttagca aagacttttg taccaagtgc 960
aaagtaggct tttatttgca tagaggccgt tgctttgatg aatgtccaga tggttttgca 1020

ccattagaag aaacatgga atgtgtgga ggatgtgaag ttggtcattg gagcgaatgg 1080
ggaacttgta gcagaaataa tcgcacatgt ggattttaa ggggtctgga aaccagaaca 1140
cggcaaattg ttaaaaagcc agtgaaagac acaataccgt gtccaacat tgctgaatcc 1200
aggagatgca agatgacaat gaggcattgt ccaggaggga agagaacacc aaaggcgaag 1260
gagaagagga acaagaaaaa gaaaaggaag ctgatagaaa gggcccagga gcaacacagc 1320
gtcttcctag ctacagacag agctaacca taaaacaaga gatccggtag atttttaggg 1380
gtttttgttt ttgcaaatgt gcacaaagct actctccact cctgcacact ggtgtgcagc 1440
ctttgtgctg ctctgcccag tatctgttcc cagtaacatg gtgaaaggaa gcaccaccag 1500
catggcccct gtgttattta tgctttgatt tgaatctgga gactgtgaag gcaggagtaa 1560
gtgcacagcc cgtgacttgg ctgagtgtgt gctgagagaa tccgtccccg gcaccatgga 1620
catgctagag gtgtgaggct gcagaacacc gctggaggac ggacttgtgc ctatttatgt 1680
gaaagaagat gcttggcagg caatgcgcta ctactcgtg acctttattt ctcacattgt 1740
gcattttcaa ggatatgttt gtgtggatat ctgcttagtg ttaccacatg gtattctcag 1800
catgttacct tcacactgtt gtgcgatgaa actgctttta gctgaggata tgctctggaa 1860
attcctgctc agtttactg cagcccta atgtacatat actgcaggag ctacatataa 1920
agctcttatt tactgtatat ttatgctttc ttgtgggtaa caagtcatac ctgattaata 1980
tgatgccact ttgtttctag tggttcctaa cccattgtct gataaatgac ttttctagtt 2040
tggggaattg acacttgttt tgttgccctt tgaaactttt tttttttccc ctgattgtgg 2100
gcttatttct cattgtaagg gtaggataaa ctagtttttg tatatagagt caaatgacca 2160
gtgtcaaaga gtttgcatat tgggtagact ttctccactc cacatgtccc acacatatag 2220
ataaagcagc aggcggcatc tggcaatcag aagcccaaac tgcctttgag tctaagatgt 2280
gatgactttg atgaaacaca actgaaaaca tgagggacta tatccagtca cttgtagcca 2340
gtttcacagg ccagctacag aattgtccaa acaaacatta tttctgactg caattttttt 2400
cccccaaatt taaagcaatc cctggcttta aatgacaagg cacctacca tgttcttggg 2460
tactgaaga agctactacc atgagcctgt gcatagaatt ttaggagata aaaggatgaa 2520
tttctgtgac tgccagtcag atcttaacag gtttctgttg agccagaatc tgtttcagat 2580
ccaagatgga gaggaacact atggaaactt cccagggtgac tttcagagca gttgtttcaa 2640
acacatcatt gtccttttag gggaaccagt ttttagaagg ttgtgaattg gctttttcac 2700
aaagcatgat tatcttctg gctgatccag gagaaaatta gaacagaaaa ataatggttg 2760

tggattttga aacaaagcaa ggtaaagcct tttttttttt tcaccttgca ttggcaaaac 2820
 tacctcttca gtgtttttaa cttttgattc aaaagcatct taccaataag gataaatatc 2880
 atatacatcg ttatgaaaat attgctatga gataataagc cacatatgaa tgttgtatac 2940
 aacttttaggg ttacattta atcctgaagt gttacctcct ttcattgtcta ttacactat 3000
 tttcccatth actaagtggg gaggggggtct cttatatag tgcttcacg ttaataagtc 3060
 aatacctggt gttcctggga tgttcttttt tgtgcattaa aaacttcaaa att 3113

<210> 323

<211> 2723

<212> DNA

<213> Homo sapiens

<400> 323

aatgacagct ggcaccaaag cccagagctg gcagcctcca cctgaggagt ggcattctcca 60
 tgaacggctt gtgttctcgc acagcccat tgcgtagatg aggaaactga agctcagaga 120
 gggtcctgcc cttgccaag gccacacagc cggatgagct agaaagggtgc taggggactg 180
 ggaggtgggg gagctgagac gctgtccgc tgctgccagg atgcggccgc ccccgctgcc 240
 agccaggcct gcctctctcc tctgtccggc tcagcagccc cggcctcctg ttgctccag 300
 tccgagctat ggccaaggga gactgattcc tgctcaccct gggagagagc tcaggatttt 360
 gtctcaaaac cttataaaag atacgaggct cgacatttta ctaaggccaa ggactcttga 420
 tctcccagac agatcctaga accacagggc acatgtgacc agaatccaat ctgtgcaaat 480
 caatcagcaa aaggagcccc cagcaaaggc gcaggccggg gcctccgggg accggcacct 540
 acacagcgca cagcccccca ggggtccgagt cctccaaacc cgtgtaggca ggagcctcct 600
 taccttgatt tgcttgatgt ttgctaact tctcttgaac accccacagc gtgaaggtaa 660
 gcaactgttc cctaaacgac ttagatcctt aaaatatgtg tggttgggcc gcatacttca 720
 tgagagagcc tccgccccaa ccagagccct cctctctctg cggccaacac cctggtagac 780
 ctgggggagc agcctctccc gccccaccc cctcagcgtg gtgctggccc gtggctcctg 840
 aaccactcac cagtccagtc cggggcctgg gcccttcccc ggggcccctg tggcagctcc 900

cagtggctca agcagcgtgc ccagcaccgc ggggtggaagg tgagctccgt ggtcttctct 960
tgcagggggc cgaaggccag agaccaggat ttggctacgg aggcagagcg tccgactata 1020
aatcggctca caagggattc aaggagtcg atgccaggg cacgctttcc aaaattttta 1080
agctgggagg aagagatagt cgctctggat cacccatggc tagacgtga aaaccacct 1140
ggttccggaa tcctgtcctc agcttcttaa tataaccgcc ttaaaacttt aatcccactt 1200
gcccctgtta cctaattaga gcagatgacc cctcccctaa tgcctgcgga gttgtgcacg 1260
tagtagggtc aggccacggc agcctaccgg caatttccgg ccaacagtta aatgagaaca 1320
tgaaaacaga aaacggttaa aactgtccct ttctgtgtga agatcacgtt cttcccccg 1380
caatgtgccc ccagacgcac gtgggtcttc agggggccag gtgcacagac gtccctccac 1440
gttcaccctt ccacccttgg actttctttt cgccgtggct gcggcaccct tgcgcttttg 1500
ctggctactg ccatggaggc acacagctgc agagacagag aggacgtggg cggcagagag 1560
gactgttgac atccaagctt ctttgtttt ttttctgt cttctctca cctcctaaag 1620
tagacttcat ttttctaac aggattagac agtcaaggag tggcttacta catgtgggag 1680
cttttggtat gtgacatgcg ggctgggcag ctgttagagt ccaacgtggg gcagcacaga 1740
gagggggcca cctcccagg ccgtggctgc ccacacacc caattagctg aattcgcgtg 1800
tggcagaggg aggaaaagga ggcaaactg ggctgggcaa tggcctcaca taggaaacag 1860
ggtcttctg gagatttggg gatggagatg tcaagcaggt ggcctctgga cgtcacggtt 1920
gccctgcatg gtggccccag agcagcctct atgaacaacc tcgtttccaa accacagccc 1980
acagccggag agtccaggaa gacttgcgca ctacagagc aagggtagga gtcctctaga 2040
cagcctcgca gccgcgccag tcgcccatag aactggctg tgaccgggcg tgctggcagc 2100
ggcagtgac agtggccagc actaacctc cctgagaaga taaccggctc attcacttcc 2160
tcccagaaga cgcgtggtag cgagtaggca caggcgtgca cctgtccccg aattactcac 2220
cgagacacac gggctgagca gacggccccg tggatggaga caaagagctc ttctgaccat 2280
atccttcta acaccgctg gcatctcctt tcgcgcctcc ctactaacc tactgacca 2340
ccttttgatt ttagcgcacc tgtgattgat aggccttcca aagagtcca cgctggcatc 2400
gccctccccg aggacggaga tgaggagtag tcagcgtgat gccaaaacgc gtcttcttaa 2460
tccaattcta attctgaatg ttctgtgtgg gcttaatacc atgtctatta atatatagcc 2520
tcgatgatga gagggttaca aagaacaaaa ctccagacac aaacctcaa attttccagc 2580
agaagcactc tgcgtcgtg agctgaggtc ggctctgcga tccatactg gccgcacca 2640

cacagcacgt gctgtgacga tggctgaacg gaaagtgtac actgttcctg aatattgaaa 2700
taaaacaata aacttttaat ggt 2723

<210> 324

<211> 2587

<212> DNA

<213> Homo sapiens

<400> 324

catatccatg tggtaggatt gtcccggccc caaagtatgg ccctggtcag gggagcccct 60
gctggaaatt gcattccag agctttgatg caggaccctt gggggatcag ggaatgaggg 120
tctccacccc aggggtctcc ttgcagttag tctatatgca ggcttcgtt ctgctcctgg 180
ggctggttct gattgcccag cttcagttct ctgagaacat gaggatggga gggggcagag 240
tcttgctgag ggcacacca gttcccgctg gaggaggaca gtgccagtct tctgcaaagg 300
gaccttgggt gggaacgggc ccggagcggg aggaacgtga ctccccagag ggaagatggg 360
catcatactg ggcccagagc tgggaaggag ttgtgccag cacagggtgg gcctggactc 420
ccctgcccc taccaccagt ggttgtggct gtagccctaa gcctggagag caggaccggc 480
ccgggggtgtc tgggaggctg ccaggtgcct cccagagctc ccaagggcc ccacctgcaa 540
gtgccagcct cagggcagtg cccaaatgag gccctctcag ctgcagccag cgatgccttg 600
ggatgctcac cgggaggag gcggttttg gctcctaagt ccttgggaga ggctgggagc 660
agtcactgcg cggcttgccg aagccattg tcgggttggg tggcttcctc agccagggtc 720
gggagggact ccaggatcag gtcctccctg tctcagttct cagtggggtg atggggagga 780
gacctggcca cccatggctc aggggcagct gagaacaagg acctgctgga gctggaagtg 840
ctgtggtgtt gagggttggg gtgggcagct tctcacacct gcctcctgcc tccttctgtc 900
cacctttcca ccacctgac ctgtcccagc cccacacatg gttctgcctg gctggcctgc 960
ccttggcacc tggcgtagag cacacagaag gcactcagct aatgctgggc aggccactc 1020
atggggagtg cgtggctgtg cagcaccagg gaaccggcac agcagcgccg gcagaaatca 1080
cagcagtaaa cttgtccggg ttgtatgcat caaggtggcg atggacgtgg gtccccccac 1140

tgcactgtgg ccctgagcac tgtatagcag cccggcaatg ggagccatta tcttgcccct 1200
 ttgacagagg aggacacaga ggcacaggga ggtgaagtag ctgccccaca ctagtgcctc 1260
 ctcgctcact caccaccccc tgcaccacag tgcagccgct tctcccacca gctgggggttc 1320
 cttggacccc caagcctggg aagggggagg tgagtttaca aaatggaaag cttaaaagga 1380
 gaaaagtgga accagaggtt tgagaagccc tgagtggtag agtaaggcct ccagcgtgc 1440
 ctctgggtgc agggcagagt ggcagaggag agggggagag gcactgggca ccatgggggc 1500
 ccagttccca cttcggggat ctctctcgca gaaccgaggg tccccttcat gggggtagat 1560
 gcccagggt agctgttgcc actgtctgtg tggacctgag tcctggacat gcccgagtga 1620
 ctcaggagt gctgcttggg cgggctctgt caccctagga tgttatacat tctgggaact 1680
 ggacaggagt ggctgcttgg gcgggctctg gcaccctggg atgttataca ttctgggagc 1740
 tggacaggag tggctgcttg ggtgggctct ggcaccctgg gatgttatac attctgggaa 1800
 ctgcaatcag ccactagaga agtcggagct acaggaagt accctggggg gggacctggg 1860
 gacatggcca ggtcagcat gggacacccg gctccagcag gagctctggt ctgtcctggg 1920
 gtctttgggg gcagggctgc ggccctgggc aggttctc caggcggagg tcctggggaa 1980
 gtgggggagc caggccagct gccgcctccc ccactatgta gcatctgatt cgtcatctct 2040
 catgaaggcg atttggttca taactctgaa actctgaaaa aggtcaaaag aagcagagag 2100
 gccctcggtg gatatgccag cttttctgcc ggtgctttct cccactactc tgggtggtct 2160
 gctctcctct tcaaacctca gctcgaggg agggcctgaa tctgccagcc cctcaggatc 2220
 tccttccctc² tgggccctcc ccagccttaa ggagcctccc agacagaagg gtggacagag 2280
 ccacctgggc agcccgagag acacacgggg gtcctccctg tggacagccc tgccagcttc 2340
 cgcccagccc tgagcttcat ttgcatcttg aggagtaagg ggtggtgaaa tgggaatgct 2400
 ggtctggctc agctggtcgt gggcataagt gcccgtgaa tggatggcat ctctccctcc 2460
 tgtcttatgt tctggggtcc aggtgcttcc cagggccatg cccctgctgc taatgcttgc 2520
 cctaaccctt accctaacca gcgtccagcg tcgtctcacc gagccgtaaa taaatcaaca 2580
 gattcgc 2587

<210> 325

<211> 2494

<212> DNA

<213> Homo sapiens

<400> 325

acttgagaga	gagaattgtg	tctcccctat	gaagatggat	tgcttgagac	agagttcaat	60
agaagatggt	aaacagataa	gctgagggca	gggggactga	gctttggaag	agggcctttc	120
aggcagcgag	gccgctggcc	tgtggctccc	tctgatgagc	ttcttctaaa	gatggtaagg	180
gctgggggaa	gagcttggca	gcaggggctg	cactctctct	cagctgtgtc	tatcttggcc	240
aagggtttta	tggttctatt	ggtaggggat	tcgagagcag	agagcgtcac	caatacactc	300
gtgttgttca	ccataggaga	agagtccttg	accatitttg	tggacaagca	gaaactggga	360
agaaagacag	agacaacagg	aggtgcctct	ataatcgggg	gcagtgggaa	cagcacagct	420
gtgtccctgg	agaccctgca	ccagctggcc	gcctcctact	tcacgcacag	agagagcacg	480
ctgcgacggc	tgcaccatat	ccagatagcc	acggggggcca	tcaaggtcac	cgagaccagg	540
accggtcctc	tgggctgcag	caactatgac	aatctggact	cagtcagttc	tgtcttggtg	600
cagagtccag	agaacaaagt	acagttactt	ggccttcagg	tgctgctgcc	tgagtatctg	660
cgtgagcgct	ttgtagctgc	agcactcagc	tacatcacat	gcagctctga	gggtgagctc	720
gtctgcaagg	agaatgactg	ctggtgcaag	tgacagccca	ccttccttga	atgcaactgc	780
cctgatgctg	acatccaggc	catggaggac	agcctgctgc	agatccagga	ctcctgggcc	840
actcacaacc	ggcagtttga	agagtcagaa	gagttccagg	ccctgctgaa	aaggctgccc	900
gatgaccggt	tectgaactc	cacagctatc	tcccagttct	gggccatgga	caccagcctt	960
cagcaccgct	accagcagct	gggagctggc	ttgaaagtgc	tgttcaaaaa	gacccatcgg	1020
atcctacgcc	ggctcttcaa	cctctgcaag	cgctgccatc	gccagcctcg	cttcgccttg	1080
cccaaggaga	ggtccttgtc	ctactggtgg	aaccgaatcc	agtccctcct	ctactgtggg	1140
gaaagcacct	ttcctggcac	tttcttgga	cagagccaca	gctgcacctg	cccctatgac	1200
caatcttcct	gccagggccc	catcccatgt	gccttgggcg	aaggggccgc	gtgtgcccac	1260
tgtgctccag	acaatagcac	acgctgtggg	agctgcaacc	cgggctatgt	gctggcccag	1320
gggctgtgcc	ggccagaggt	ggccgagtcc	ctggaaaact	ttcttgggct	ggagacagac	1380
ttgcaggacc	tggagctaaa	gtacctgctg	cagaagcagg	atagccgcat	tgaggtacac	1440
tccatcttca	tcagcaatga	catgcggctg	ggcagctggt	ttgacccttc	ctggaggaag	1500

cgcatgctgc tcaccctgaa gagcaacaag tacaagcctg ggctgggtgca cgtgatgttg 1560
 gccttgtcct tgcagatctg tctcaccaag aacagcaccc tggagcctgt catggccatc 1620
 tacgtcaacc cctttggggg cagccactct gagagctggg tcatgcctgt gaatgagggc 1680
 agctttcctg actgggaaag gactaacgtg gatgcagctg cccagtgcc aactggact 1740
 atcaccttgg ggaataggtg gaagactttc tttgagacag ttcattgtta cctacggagc 1800
 cgaatcaagt ccctggatga cagctccaat gagacaatct actatgagcc cctggagatg 1860
 actgatccct ctaagaattt gggttacatg aaaattaaca ccttgcaggt ctttggctac 1920
 agcctgccct ttgaccacaga tgctatccgg gacttaattc tccagttgga ctaccatat 1980
 actcaagggt cccaggactc tgcactcttg cagctcattg agctcaggga ccgggtgaac 2040
 cagctttctc cacctggcaa agtccgactt gaccttttct cctgcttgct ccggcatcgg 2100
 ctttaagctgg ccaacaatga ggtgggcagg atccagtcct ccctgagggc tttcaattct 2160
 aagctgcca accctgtgga atatgagacc ggcaagctct gtagctaag ggcgccccac 2220
 ttcagcactg ggcaaggagg ggatccatga atctggggta caaagataat ctaagccctc 2280
 accttagtgc caacagggtg tgctccacg agactttcag catccagtag atgggacctc 2340
 gaggctcgag ctgaagcagg cgagagagaa acagctactg cgtgcgtgcg cgcacgcata 2400
 cacacacaca cacacacact ggcacaggga ggctacaact aagcagcctc agatctgtaa 2460
 agttgattgg tgctttctaa aatgaatgca attg 2494

<210> 326

<211> 2029

<212> DNA

<213> Homo sapiens

<400> 326

ggatgttgtg aaccgggtcg cggcggccga ggctcgggcc tccaggacca ctggctgccc 60
 atgagagacg aaggatggca tccaaggggg cggcgtgtc tttctccgc aagagctgta 120
 ggctgacctc agatgctgag aaatccaggg tcacaggac ccgctgcagc tgggagggga 180
 gctgtccagg aggccggcct gggaatgagc acaggcctgc ggctggcaga gagccgggtc 240

gagccagccc tggagaagca ggcccagctg gaggagcagc tgcgggacaa ggtgctccac 300
gagaaggacc tgtcccagca gcagatgcaa agcgacctgg acaaggctga cctcagtgcc 360
aggaggggtcc ctggtgggtg ctgcatgagg caggcgtcac tgcagaagag tgacagagct 420
gggcctggca gtgaagcgtc tacagaagca gaatctggag aaggatcagg tcgacaagga 480
cctcaccgag aagcttgagg ccctggaatc cctgcggcta caggagcagg cggccctgga 540
gacagaggat ggagaggggc tacagcggag cctaaggagc ctggcacagg ccgtcctgtc 600
tgacgctgag agcggcagcc tgcgtccaac agcgtccgac cgcagcctgc gggggctctc 660
gggccagcgg acccgtctc caccgcggcg ctctcgccg ggccgaggcc gtctgccccg 720
cagaggcccc tccccggcct gctcagacga ctccacgtc gcttgccctg attctctccg 780
ccctgcactt ttgccagctg aaggtccagg taggaagggg cttagtttt ctgggcgcag 840
ccagaggccc agggggaggg gctcgcgcc tccagggtggg ggtgggggcg tgtctggggg 900
aggagtctga gcgccctggg gtgcagccag agccctgaga aatagtgtct gaggggtgtca 960
ggacccccaa ggaggtggtc gagggctctg cgctgaagcc agcccagaag tgggggtgct 1020
tgggcagctg ggggtgggtg cttgggcagc cgggtggaggg aggaggctgc ggcagtgtta 1080
gggtcctggt agagaggag acaggtccct ggtcatacag agccaggacc ctgggaaaag 1140
gtctagcaag ggaaatcaca gcctaggatg agagcttggg aactaggggc agagccaggg 1200
tagggaggag tgtgagagtg gaaccaggat gcaaggggga ggagcctggg agccctgggg 1260
gtgggatcag aaccaggag acgagtgtgc ctgggagttt gtctggcatc ccgggggctt 1320
tgataggagt tgtccgggac cccagggaga tgagggttca gaggggtggtg agggcacata 1380
ggaggggagt ggaagcctgg ctctcaggcc taggccccta tcctgccccca gggcaggtcc 1440
aggccctgga cccgcctag cgtaggctag tgtgtatccc tggaaccaga agagagtagg 1500
tgggctctgg aggcctcaaa ggacccccgc tagactctgt gatccccacg cccagaaca 1560
tgcgtgggcg ctatgaggca agccaggacc tgctgggcac cctgcggaag cagcttagcg 1620
acagcgagag tgagcggcgg gccctagagg aacacctgcg tggcgccgtc ggtcttgtcc 1680
cgcaggcact ggccaacatg gcgaaacccc gtctctacta aaaatttaaa aaattgccca 1740
ggcacagtgg ctaacgcctg taatcccagc actttgggag gccgaggcgt gcagatcact 1800
tgaggtcagg aatttgagac cagcctggcc aacatggtga aaccacctt ctaaataaaa 1860
atgcaaaaat tagctgggcg tggtgatagg cgcttgtaat cccagctact cgggaggctg 1920
aggcaggaga atcgcttgaa ctctggagggt ggagattgca gcaagctgtg tggagtgcag 1980

tgagattgtg tcactgcact ccagcctagg caagagtgag actgtgtgt

2029

<210> 327

<211> 2817

<212> DNA

<213> Homo sapiens

<400> 327

atTTTTTTaa agtcctacta ccctgcagct cactacttta ccttgatttg gaagatcatg 60
gaatatctat ttgaatcctg gatgtatTTT tctcacagtc ttcttgcttc ctgaaatttc 120
ctctgggtgtt gagggaaagc tgagagaatg aaggctctaa atccccagtg gaagcatgat 180
atggcgaagc agagctggtg ctgaattgtt ctctctgatg gctctatggg agtggatagc 240
actgagtcctt cattgctggg ttttagcggg tgctgctgtt tcggatcagc atgccacaag 300
ccccctcgac tggctcctct ctgataaggg acccttccat cgctcacagg aatacacaga 360
ttttgtggac agaagccggc agggatttag cacaagatac aagatataca gggagtttgg 420
ccgttgga aa gtaaataacc ttgcagttga gagaagaaat ttccttggct ctctctgcc 480
tcttgcccct gaattcttcc gcaacataag acttttggga cgtcgacctt cccttcagca 540
aatcacagaa aaccttatca agaaatatgg gacacatttc ttgctatctg ctactctggg 600
aggagaggag tcactcacia tttttgtgga caagcggaag ttgagcaaac gagctgaagg 660
aagtgattcc accaccaata gctcttcggg cactctggag acgctacatc agctagccgc 720
ttcttatttc attgacaggg acagcacctt tcggagactt caccacattc aaattgcatc 780
cactgccata aaggtaacag aaacacggac tggctcctctt ggctgcagta actatgacaa 840
cctagattct gtcagttctg ttctgggttca gagtcctgag aataagattc agttgcaagg 900
gcttcaagta cttctcccag actatcttca ggaacgtttt gtacaagcag ctttgagcta 960
cattgcttgc aattcagagg gagagtttat ctgcaaggaa aatgactgct ggtgtcactg 1020
tgggtccaaa tttccagaat gcaactgccc ctccatggac attcaagcca tggaagagaa 1080
tcttcttcga ataactgaaa cctggaaagc ttacaacagt gactttgagg aatcagatga 1140
attcaagtta tttatgaaaa ggctacctat gaattatttc ctcaacacat ctactataat 1200

gcatttgtgg acaatggatt ctaattttca ggcgccgttat gaacaactgg agaacagcat 1260
gaaacaactt ttcctaaagg cgcagaaaaat tgtacacaag ctttttagcc ttagcaagag 1320
gtgtcataaa caaccctca tcagcctgcc aagacaaaga acctcaacct actggcttac 1380
tcgcatccag tcttttctct actgcaatga gaacggcctc ctaggcagct tttcagaaga 1440
gacgcactcg tgcacgtgtc cgaatgacca ggtggctctgc accgcgttcc tgccctgcac 1500
agtgggagac gcctctgcct gcctgacatg cgcaccagac aaccgcaccc gctgcggcac 1560
ctgcaacacc ggctacatgc tcagccaggg gctctgcaag cctgaagtcg ccgagtccac 1620
cgatcactat attggctttg aaactgacct gcaagatctc gagatgaaat atctgctgca 1680
gaaaacggac agacgaatag aagtccatgc catTTTTatc agcaatgaca tgcgcctcaa 1740
tagctggttt gatccctcct ggcgtaagcg gatgctcctc acctgaaga gcaataagta 1800
caagtcaagt ctggccata tgattttggg tctctcttta cagatttgct taactaaaaa 1860
cagcaccttg gagccagtgt tggctgttta tgtcaatccc ttcggaggca gccactctga 1920
gagctggttt atgcctgtga atgaaaacag ctttccagac tgggagcggga ctaagttgga 1980
cctaccctg cagtgttata actggacatt aactctgggg aacaaatgga agacattttt 2040
tgagacagta cacatctacc tgagaagtcg catcaagtcc aatggtccca atggtaatga 2100
gagcatttac tatgaacctc tggagtttat tgacccttcc cggaacctgg gctatatgaa 2160
aatcaataac attcaagtgt ttggctacag catgcacttt gacctgaag caattcggga 2220
cctgattttg cagctggact accctatac tcagggatcc caggattcag cacttttgca 2280
actactagag atcagagacc gtgtaaataa actctcccca cctggtcagc gtcgtctaga 2340
tcttttctct tgcttgcttc gtcatagact caagctgtct actagtgagg tggtgaggat 2400
ccaatctgct ctgcaggcgt ttaatgcaa attgccaaac acaatggatt atgacacgac 2460
caaattatgt agttaaccat aaatgtcaag cacaaccaa aatcttgaag gagtttttac 2520
agtgcctttg tggaacagtt tatgtttgga agagtaaatt taaattgtct tttcaatata 2580
tgtcttatat cagtcaataa cattggatgg caatttacac acatgaactt gctgacaatg 2640
aatatattat acagcagttt tggtttatga atgacataaa tactgacacc agtctagaag 2700
acattctact ttttacaata aatttcattt gtaattttat atgttccgtg gcaatgcttt 2760
tgtgcattac atcctctaga gggaacataa aaagatacca ataaaatttt gtagctg 2817

<210> 328

<211> 2296

<212> DNA

<213> Homo sapiens

<400> 328

```
ctcaaaagca gcgttagggg caggcagcct ggttccaagg tcacagccct gtgaggacca 60
tgcgccgtgg ctgttttacg ggggtgctca cacagggcta gcccgtgcca gacactgtgc 120
caagcacttg ccatgtacgg gctctctttt tcctcacaga ttcccccgag gcgagcgcta 180
ttggtaacct atcttcaga tatggaaacc aaggctgagg ggaagggact ggcccaagat 240
gcacagctca tgaggagcag agctacagtg tttgaaagca aaagcccttc agctccgacc 300
tctcagaacg gggcctccca tcagaccccc agcttccaca gggtgcccgg tgggcctcac 360
tctgagagta gcgggacctc attttctctt tttccacca accaggaagg aagggcaggg 420
gtgtctgtgc accatggggc cggcaggaaa ggctgggcct gcagccgcc cccacttccc 480
tcaacaccct cgccttctg ccatcctgcc cgccttggtc cagaccctc agccctggtc 540
tggccactgc tttgatggcc gggagtgttg agctgcagga aattggaggc cccctcccag 600
gccccatcac ccaccaagag ccatcaggg gactgcccgt gggactgtgt cctgtcttc 660
ctctctggat ggagaaggcg cacatcgtgc caccctggg ggccaactgc agagcccagc 720
aggggtgcat ggggcctgcc tccatgcccc tctcctcac tcacatctc agtgccecca 780
ccccagtcca tccgtggtc tctctgtctt atctctctct ctctgcccc caccatctc 840
tgttccatc tgtcttgctc ctcccgttca ctctctttgt ctctccttc ctcagtgtct 900
tgcccccttc ctttccact cttcatctgt ctctctgtgt ctctatctct gtctctctct 960
ctgtctccct ccctatccct caccctcact cctctccag cccctctct cttccttct 1020
gtctcccgct catctgggtc atcttgctgc atcctgcagc tccccctact gagccgtgag 1080
gataatgctc agtggtgtct tagaccagcc tgtggtgatg atcctgggca cttgggacac 1140
aagctccctg ccaagctgag cagtgggggt taggagctct ctaggtgaag ggtattcggg 1200
tctgagtatc ctcacatcaa ctggagggtga gaagtgtgt gtggtcttgt gcaaggcact 1260
caccctctct gagcctcagt ttcctcaact gtaaaatgag gacaatcgta gcagaacacc 1320
tgccccctggg aggggtgtgag atggagaata taacataaca ggtgtcaagc acaacaaggc 1380
```

tcttagcaaa caccagtttc tccccgcctt gtggcagtga accatgaccc ctgaagccca 1440
 tgtagagcc aggagtggg gtggggggca ttgcaactaa agaccagggc tccacctcct 1500
 gtcctgagcc ccaatgtggc tagcagagcc accagacggt gagagtgaat cctgtgcccc 1560
 gcactgccct accagatctt acaccatcct tgcagccagc tgactaggct gtggtcagca 1620
 aaccatttc acagatgggg aaactgaggg gcattagcaa ggtaaggatt gaaaccaga 1680
 tctggctcca catcttatga tttctccctt ctaccatta gctgggagca ccatcaggcc 1740
 aggatggctc atgggtggcag cccctatacc cctggctggg cagaggaggt gctgacaatt 1800
 actggctgaa tgaatgaata aaggaaggaa caaaccacac cttccctggc cttactaaga 1860
 tgcaatgagg tgttcttcca gagggaattt tggagggaac caaggggaga tgaaaggtac 1920
 tcaggagtgg ggattagggt ggaccagca ataactaact tggaatgaac taaccagaa 1980
 tagccagacc tagttgggta ttcacactgc aatttgggcc ttttctcagtt tttgttcaag 2040
 tctgattata tcaaggaaaa ggtcttggtt tgaggctaac atgtctttaa tgactgtaac 2100
 atttgtcact gtctcttttt aatagagaga aggtctcaaa ctcagggtg ttgacatcag 2160
 cgtgctagaa tgtactgata gcgctttggt ttctttgtac ttgccgttac tttctggttt 2220
 tggcaagtgc tactggtttt ccatgtacag taatgatgta aagcttcctt gataaatgca 2280
 ttgattgaag tccttt 2296

<210> 329

<211> 1755

<212> DNA

<213> Homo sapiens

<400> 329

agcagactgc gctcccaaag gcgtttgcga ccgtaatcg agggactcta cagactctcc 60
 taggagcagc tcctacagga atgaattcag ggcatggacg gacatcaagc ctgtgaaacc 120
 aataaaggcc aagccccagt acaagcccc agatgataag atggttcatg agaccagcta 180
 cagtgtcag ttcaaaggag aggccagcaa gccacaaca gctgacaata aggtcattga 240
 tcgcagaaga atacgcagcc tctacagcga acccttcaag gaacccccaa aggtggaaaa 300

acctagtgtt cagagttcca aaccaaaaaa gacctcagcg agccataagc ccacgaggaa 360
ggccaaagac aagcaggcgg tgtcaggcca ggctgccaaag aaaaagagcg cggagggccc 420
gagtaccacc aagccagacg acaaggagca aagcaaagag atgaacaata aactggctga 480
ggcgaaagag agcctggctc aaccgcgcag tgattcaagt aagactcaag gtcctgtagc 540
cacagagcca gacaaggatc aaggttctgt gggtcccaggc cttctgaaag gtcaagggtcc 600
tatgggtgcaa gagcctctga agaagcaagg ttctgtggtc ccagggcctc caaaggatct 660
agggtcccatg atcccattac cagtcaagga tcaagatcac acgggtccctg agcctttaa 720
gaatgaaagc cctgttatct cagcaccagt caaggacca ggtccctcgg tcccagttcc 780
tccaaagaat caaagtccta tgggtccagc aaaagttaag gatcaaggct ctgtgggtacc 840
agagtctcta aaggatcaag gtcctaggat tcctgagcct gtgaagaatc aagtcctat 900
gggtcccagca cctgtcaagg atgaagggtcc catgggtctca gcatctgtca aggatcaagg 960
tcccatggtc tcagcacctg tcaaggatca aggtcccata gtcccagcac ctgtcaaggg 1020
tgaagggtccc atagtcccag cacctgtcaa ggatgaagggt cccatgggtct cagcacctat 1080
caaggatcaa gatcccatgg tcccagagca tccgaaggat gaaagtgcc tggccacagc 1140
acccataaag aatcaagggt ccatgggtctc tgagcctgta aagaatcaag gtttagtggt 1200
ctcagggcca gtcaaggatc aagatgttgt agtcccagag catgcaaagg ttcacgattc 1260
tgcagttgtg gcacctgtaa agaataagg ttctgtggtc cccgagtccg tgaagaatca 1320
agacccatt ctcccagtac tagttaagga tcaaggcccc acagtcctac agcctccaaa 1380
gaatcaagggt cgtatagtcc ctgaacctct gaagaatcaa gttcctatag tcccagtgcc 1440
tctgaaggat caagatcctc tgggtgccagt accagcaaag gaccaagggtc ctgcaggtccc 1500
tgaacctctg aagactcaag gtcccaggga cctcagcta cctactgtct cacctctacc 1560
ccgagtcatt atcccaactg cccccatac ggaatacatt gagaggtccc cttgacactc 1620
acccttgac acaccaatga aggagctgac agtgagagtg ctcccctccc aggggcagtg 1680
aagacacata tttaatctgc atgaaacatg tacagtagtc ttgctggaat ctaataaaaa 1740
tgggtccctct ggctc 1755

<210> 330

<211> 2261

<212> DNA

<213> Homo sapiens

<400> 330

atcatgctaa	ttgtctgcac	tagagctgga	gaacgccacc	caaaatgaag	agagaaaggg	60
gagccctgtc	cagagcctcc	agggccctgc	gccttgctcc	ttttgtctac	cttcttctga	120
tccagacaga	ccccctggag	ggggtgaaca	tcaccagccc	cgtgcgcctg	atccatggca	180
ccgtggggaa	gtcggctctg	ctttctgtgc	agtacagcag	taccagcagc	gacaggcctg	240
tagtgaagtg	gcagctgaag	cgggacaagc	cagtgaaccgt	ggtgcagtcc	attggcacag	300
aggtcatcgg	caccctgcgg	cctgactctc	gagaccgtat	ccgactcttt	gaaaatggct	360
ccctgcttct	cagcgacctg	cagctggccg	atgagggcac	ctatgaggtc	gagatctcca	420
tcaccgacga	caccttcact	ggggagaaga	ccatcaacct	tactgtagat	gtgcccattt	480
cgaggccaca	ggtgttggtg	gcttcaacca	ctgtgctgga	gctcagcgag	gccttcacct	540
tgaactgctc	acatgagaat	ggcaccaagc	ccagctacac	ctggctgaag	gatggcaagc	600
ccctcctcaa	tgactcgaga	atgctcctgt	cccccgacca	aaaggtgctc	accatcaccc	660
gcgtgctcat	ggaggatgac	gacctgtaca	gctgcgtggt	ggagaacccc	atcagccagg	720
gccgcagcct	gcctgtcaag	atcaccgat	acagaagaag	ctccctttac	atcatcttgt	780
ctacaggagg	catcttcctc	cttgtgacct	tggtgacagt	ctgtgcctgc	tggaaacctt	840
ccaaaaggaa	acagaagaag	ctagaaaagc	aaaactccct	ggaatacatg	gatcagaatg	900
atgaccgcct	gaaaccagaa	ggtgagctcc	cagctaccca	atcacccatc	ccatcaacaa	960
tcagatcagt	gggctgctgg	gaaaaggcag	aactgggcga	caaggaaaac	agctctgcag	1020
ggacccttcc	ctctgacctg	ggcgctagca	agggcaaaga	acccgagcct	gccagcttgg	1080
cctcctccca	cagcctccct	cggaggcatg	ccatgccaag	cactctttct	gtctctgttc	1140
atgaataaaa	gagatggatg	ggcttattct	tatagagaag	tgaatttcac	ttactccctt	1200
ggcccgaaaa	ctagaccaaa	tgaggaactg	ttttagctca	tcaaactcat	atattcctcc	1260
tggtttcctt	acaaaacaag	cctttcaaac	aatcattgtc	ctcaggaaag	ttgttgagct	1320
tcctccagct	gtgagaataa	gtcctaattc	ccagagaaat	ggtgggggga	ggaggaggct	1380
tattgcttcc	cagcatttgg	ggggaacatg	atccaacccc	tggcctcctg	ccacccatct	1440
gccctgctcc	cacatgctca	ggtcccaggg	cacagaaaaa	gggcagactc	cctaatacaca	1500

ctaacaatcaa aataaagagg ctgggccgct gtgtagccag gacatgccca tgccaccgcc 1560
tattgaacag ttcataaggag tggcagtaat ctactgtgtg aggagagagg gcaattaaaa 1620
agctgaaaga gaaggaggcc ctctgtgtat tccgttcctt cctccttaat gcctccaagg 1680
gtccttgcac ccctagtctc ctaaaactcca gctctgattc gccatcaacc catggagcaa 1740
ttccaaggcc ccagttaccc atcacctcca caccagggtca agttttgtct cagccccaaa 1800
ggcactgaca tttctagttt gccccctctg ccctgaaccc cacagcatgc ctgtctcagc 1860
tccctgtccc tcggcacttc cccagggtca tttgagcagg tgtgccttcg cagctcccct 1920
aaacttccca ggtgcctcat ccataatgag ataatgcatg taggggaaaa gtttctcaag 1980
aagggtgaag aggcagcagg acttgataa ggagtacctg ctggtcagcc ttgagatgca 2040
cagggtgaagg ttaggggtgag atgagaacat gccataccct ggtgctgaat ccctgagggg 2100
ccagcttgcc aggcttaagc caaatctgcc ttaaattggg ggtggggagg ggtaagtaag 2160
gaagtggggt ttgtttttgt gttgttttca tcttcatctt tgtattacta gcatccagca 2220
gagtgccctag cacatactgg atgctcaata aacttttgat g 2261

<210> 331

<211> 2371

<212> DNA

<213> Homo sapiens

<400> 331

attttgagtc aggagcctgg actgacccgg gtccctccac agcactggag ggggtgggac 60
acatcactac agggtttcct tccatgagga ctctgaggag ttgacagtgg aggcaaggag 120
tgagctggat cccaagtgat ggtggtttcc tcggagggcg agctgagtcc tgcgcgactg 180
gttagcacgg tggagctggt agccacgcct gctggctggc gtgctgaac aggtgtggac 240
cgcaggatct cagcactctg acccaagggg aagcatgtcg aagaaaggcc ggagcaaggg 300
cgagaagccc gagatggaga cggacgcggt gcagatggcc aacgaggagc tgcgggccaa 360
gctgaccagc attcagatcg agttccagca ggaaaaaagc aaggtgggca aactgcgcga 420
gcggctgcag gaggcgaagc tggagcgcga gcaggagcag cgacggcaca cggcctacat 480

ttcggagctc aaggccaagc tgcattgagga gaagaccaag gagctgcagg cgctgcgcga 540
ggggctcatc cggcagcacg agcaggaggc ggcgcgccacc gccaagatca aggagggcga 600
gctgcagcgg ctgcaggcca cgctgaacgt gctgcgcgac ggcgcgcccg acaaggtcaa 660
gacggcgctg ctgaccgagg cgcgcgagga ggcgcgcagg gccttcgatg gagagcgcct 720
gctggctgcag caggagatcc tggagctcaa ggagcgcgcg aagcaggcag aggagggcgt 780
cagtaactgc atgcaggctg acaagaccaa ggagcccgac ctgcgtgccg cctaccaggc 840
gcaccaagac gaggtgcacc gcatcaagcg cgagtgcgag cgcgacatcc gcaggctgat 900
ggatgagatc aaagggaaag accgtgtgat tctggcctcg gagaaggaac ttggcgtgca 960
ggctgggcag acccagaagc tgcttctgca gaaagaggct ttggatgagc agctggttca 1020
ggatcaaggag gccgagcggc accacagtag tccaaagaga gagctcccgc ccgggatcgg 1080
ggacatggtg gagctcatgg gcgtccagga tcaacatatg gacgagcgag atgtgaggcg 1140
atttcaacta aaaattgctg aactgaattc agtgatacgg aagctggaag acagaaatac 1200
gctgttgga gatgagagga atgaactgct gaaacgctca cgagagaccg aggttcagct 1260
gaagcccctg gtggagaaga acaagcggat gaacaagaag aatgaggatc tgttgcagag 1320
tatccagagg atggaggaga aaatcaagaa cctcacacgg gaaaacgcgg aaatgaaaga 1380
aaagctgtca gcgcaggcgt ctctgaagcg gcatacctcc ttgaatgacc tcagcctgac 1440
gagggatgag caggagatcg agttcctgag gctgcagggt ctggagcagc agcacgtcat 1500
tgacgacctc tctactggaga gagaacggct gttgcgctcc aaaaggcatc gagggaaaag 1560
tctgaaaccg cccaagaagc atgttgtgga gacatttttt ggatttgatg aggagtctgt 1620
ggactcagaa acgttgtccg aaacatccta caacacagac aggacagaca ggaccccagc 1680
cacgcccga gaagacttgg acgatgccac agcccgagag gaggtgacc tgcgtttctg 1740
ccagctgacc cgggagtacc aggccttgca acgcgcctac gccctgctcc aggagcaggt 1800
gggaggcacg ctggacgtg agagggaggc ccggactcgg gagcagctac aagctgatct 1860
gctgaggtgt caggccaaaa tcgaagattt ggagaagtta ctggttgaga agggacagga 1920
ttccaagtgg gttgaagaga agcagctgct catcagaaca aaccaagact tgctggaaaa 1980
gatttacaga ctggaaatgg aagagaacca gctgaagaat gaaatgcaag acgccaagga 2040
tcagaacgag ctgttagaat tcagagtgtc agaactcgaa gtaagagact ctatctgttg 2100
taaactctca aacggagcag acattctctt tgaacccaaa ctgaaattca tgtaaagctc 2160
tcagatgttt tcaagcatgt gtaaagggga catgttatag tttctttctt tctttctttc 2220

tttctttttt taaatctgta tgttcagaat aatttcactg ccttaatgtg ttctggagag 2280
cgtgctcacc caagtctatg gacatgtacc agagctaata tatttattgc ctatggcttg 2340
ttttgcactt aataaaataa ttgttttttg c 2371

<210> 332

<211> 3119

<212> DNA

<213> Homo sapiens

<400> 332

cttttttttt aatgacagct cccatgccat gtaaaacttg tgttaaagac atttgcctgc 60
ttttctcctg ttgacctatc ttaaatttca atttaatttt caagcccatc tgacaagaag 120
ccctaaatgg gatccccact cccctaccca catatgaaac tcagtgaatt atgtaaatag 180
attatttgac ctcttaactc taaaatttta catgttaagt tggccctca aaagttttta 240
aacgctattc ttttaatttg aaaaatgggg cgggtccctt ctatttgggt atgacatgta 300
gtagatattg cagggcccac ccagatcccc tcaccaggag ctgccggagc attagctgca 360
gacagctcag agctgagtcc ctctctggga atgtcgctgg ccaaaggaaa gtggctctca 420
acgttaggca ccctccctgc agcaggctgc acccagtaac ggtaggcggc ggcgaaacag 480
tttataaagg ctcagcccca ttgccttgat cagggtcaact ctgaaaagcc agctcagcat 540
cagggcctcc cttgggattc ctgggggctg atgtcacaac tcacaacaga tcaccacctt 600
ctacaagctc tgcagaacat tgctgccatc agcctggcca tcaactacc aaacaaggcc 660
acccgcctct ggaatgtgga gtgttagccc ttggtggggc gtgcatggga ctagttcatc 720
tgccacaggg attttagagc agacatctaa cctcattcag gaaaactcct gtagcgccag 780
tgcccagctc tccttgagct gaccactcca gttaggatgc caagcagcca cgtctccaag 840
agctcccgtg cgtaggctgg acacaagcac aggctgtagc atggtgaaaa taagccaagc 900
agtgcagaat gcctcagaaa ggggtgggcag gggggccctta agaaggttca gagaccagcc 960
ttctccagag gctgtcactg caggagccgt gggcctggga agacttgga gcggcctctc 1020
tcaactggtt tctgtctccg tggagctgga actgcctgca cttgccttca gagggaggca 1080

cagtccaccc agatccacct ttccagcaag acccccagtg gctgcccagc ctgggagcac 1140
ctcttttgctt ttcacaccaa accaaaactg gcgagagccc ctccctagcca ccagtgatcc 1200
ccaagcatcc agtacagaac caggcatcga gctagctccc tgcacggccg caccctccca 1260
gagaactcct tgaggagaac aagtgccctt ggggacagcc ggcaggcgcc cctgtacgtc 1320
tgctcatgca ccaggcagca cagccgcagt tcctcagttg ttgttttgac atatttcagt 1380
ttccacctca cgtttttaga gcagaaccac actgtctccc tggaggggct cgagggcagtg 1440
accggggact gaccattctg tgaaaggagc agaatgtgag gagcacgcgt gagcttatgt 1500
accgtgaaga tgatcagagg atatcttatt ttaagagtaa aaaccacat aattttattt 1560
ctgcttgata gtcattgtag tctgtcatac ccacctctgg gactctgcgt ggctgtttgg 1620
ctgtcacttg tagcaataac gacattagtt ctagtcagtg ctgttttaca tttttctttt 1680
gatgggttta gtcttgccct ggagtgccga tgatgattct ccctccagag ccacgcttgg 1740
gaacatgaag caagtctggc gtgtgggctg cgtgccggcc ttagtgggac ccgtgggggtt 1800
ggagcatgcc tttaggggca gtgtctgggc cgaagcacgt cccaccacac agtgccagag 1860
ccagagaagg ggccccacca ccaaggccaa gcttgaccag gtcagcattg ccatggccca 1920
gtgtgccccg tggcctctga agatccctct gtgcagggtc tgcagggatc tggattgcaa 1980
gggcccgaagt ctgcaggtct ggaagcatct tcctataaga gcactttcgc cttctgggtc 2040
aggactccaa ggtgcagcgg gcttcacagc cctacaattg ggttctcagc taagccccag 2100
agttctggta gaaccatccc ggggcgggtg gaggggtggga ttttaaggag acgggaacac 2160
atggggcagg tcctggaact tgggtggcctg aggactgagg ccattgccct ggtggaaagg 2220
cctggcctgg ttctgtggc ttgggacctg aataggcagg tgctgctggc tccgtagaaa 2280
cccttttccc atcttttgct ctttgccaaa cctacctgc tttgggagct gcctgcacca 2340
ccccagagaa ggccccacct tcttcatccc tcagaccga ggaggcctcc cagtaaggag 2400
tttccaaga ggggactcac aggaacaag tcttagtgct tgggaggag gccccgtgc 2460
gtgctcagac tcacagccaa cctggaaggt agacgagata gcgccacca cgcccccca 2520
caccacagac tccgagtaaa gcgggcggta gggccggagt cacctcccct atggcagtg 2580
ccgccgtgt actccatcct cccgtcagga agatcagctg taaataaacg ctgggctccc 2640
cagagcacct gtccgcccac tgcccttgct gttctgggat cttcgctgca gttcacggga 2700
aacaagcctg agtccgctcg caccgcggc tgctctcccg gctcggcccg gccgcctctg 2760
tctccggcca ccgggtggcg ctgccgagcc agagccgccg cgtcccggcg ctttccagga 2820

gccccaggcc cggaggaggc gaagcccgca gagcaaaggt ggaaacacgt gcctacgctg 2880
taaagaaatc ctgttccaga gcatacctgt tgtacaaaca gacactgttc ctaacgagag 2940
gagtgcgta ttttcatcac cgttttcaat ttgttttctt acgggtttac gattttgaat 3000
ttttcttatt tggttgaaag aattttgatt ctatcagcct gagtgagttc agcctgtaaa 3060
aaggatgtta agctgtgggt aaaatatgca aacgaaaaga aatatattgt acaaattct 3119

<210> 333

<211> 2170

<212> DNA

<213> Homo sapiens

<400> 333

gcgtcgcagc ggaactgctg agattcaggc ccagggtgcg cgctcagacg cggcgcgagc 60
gccaggcaag ctgcggctgc tacctcccac gcctctccag gtgcactcgg cgccgcccc 120
ctgcacctgg ctgcggtgcc gagtcaactca ggctgtgtc agggagagag ggaggagact 180
gtcctggaaa gcagacacgt aagcccccg cggatcctca gacagctctg gagaggggtc 240
ccgggggaag gtcactgcgt ccagccggcc agcaggcagc tagagcccc gagccccaag 300
ccccactcca gccttgccac attcaccgga accgggactc taagccctgc aagtggcttt 360
ctagggttgc attgacaccg tgcgtgcag cccacccta tctcgggctc cctgctgccc 420
caagatcagc gccaaggggg ctgcaccatg gccatgagcc ttttgcagga ctggtgccgg 480
agcctggacg tggacgcgca cagggccctg ctggtcaccg gcatcccgga gggcctggag 540
caggcagacg tcgaagccgt cctgcagccg accctcctgc ccctgggcac gttcaggttg 600
cgacacatga aggctttgat gaacgagaag gcccaggccg ccctggtgga gtttgtggag 660
gacgtcaatc acgtgccat tcccaggag atcccaggca aggatggggt ctggagggtt 720
ctgtggaagg accgtgcgca ggacacgagg gtctgaggc agatgagacg cctgctgctg 780
gatgacgggc ccacgcaggc cgcggaggct gggacccccg gggaggcacc caccctccc 840
gcttcggaga cgcaggccca ggattctggg gaggtaacag ggcaggctgg ctcgcttctt 900
ggggcagcca ggaaccaag gaggggccgt cggggtcgca gaaacagaac cagacgcaac 960

aggttgaccc agaagggcaa gaagagaagc cgaggaggac ggccgtctgc tcccgcgagg 1020
agtgaggccg aggactcttc cgacgagagc ctgggcatcg tgatcgagga gatcgaccag 1080
ggcgacctga gcggaaga ggaccagagc gcgctgtacg ccacgctgca ggccgctgcc 1140
agggagctgg ttaggcagtg ggcgccctgc aactccgagg gggcctgccc cacttgtccc 1200
tgggaaggaa taggagggtt tgggtgtgac ctcacagtcc agaccagact gtcccagtcc 1260
tatgtcaggg acaccagat gtagaagctg actgagacct gctgcagggc gtgggtgctc 1320
ccccctgctt ggaggctgtc cctggacagt gaccacacca ctgaggacca ggctgggtgt 1380
accttgagct gggcacagca gcctgtggtg ttgcctgtgg gtggggaggg cccaggtgt 1440
gcttctccc tagcagtcct aggcttctct ccctgtgccc tgtgtcacct ggatcctcca 1500
gtaaagtga attcagcact gtactctctc tgtgctctgg gcagtggggc aggcgggggtg 1560
tgggagcgtg ggccacagat gtccacggtc ttgactgtgg tttgcccaga atacctggga 1620
actgtcctgt cactggttta catacactgt cctttgctgc ttcgggggtc ctgcctggct 1680
ctccctaccc cccagcatca tctcaccct tgcagatctg agccagcttc cactcccacc 1740
cctgatgcct cccacttcc agcctcagct ccgaagcccc tggacacca tggagacccc 1800
gcccagccaa tccccaccct agcttccacc cagatacact ctgccaggcc acagctgcag 1860
gcactctccc cccagcctcc acccctcacc tgtgccctgg acctcagact cagctttcca 1920
tcctacctga gttttctgcc tccctccatc ctgtgtcccc ccaccataca tggctgccag 1980
agacgtcctc ttagaagtca cacctggggt ctgattgcgt ccctgcctc cccagatccc 2040
ccaaggctct cttcctgtgc cgtcatatct gcagttctta ggactgtcta gacatgcttt 2100
gttcaactag gtaatcacac ggggtaaatt ggatttaaata gtaattaaga ttaaataaaa 2160
atacacatgc 2170

<210> 334

<211> 2219

<212> DNA

<213> Homo sapiens

<400> 334

actgctgcgg gggccgcggg gggcgcagct ggggcgcggc tcggagggga ggctaggggg 60
ccgtgccagg cccgaagccg aggcggggcc gggatgcggc gctgaggccc agcatggccg 120
gcccgggccc caccttcccg ctgcaccggc tcgtctgggc gaaccggcat cgcgaactgg 180
aggccgcact gcacagccac caggttccgc caaactcctg acaacctgca gctctgcctg 240
accaggcccc gccgccagac cccggctctg cccctgcctt ccctcctgcc ccctcctctc 300
ccctgccagg acacgcaggc caccctctgc catctccctg cacgacattg aacaggagga 360
ccccgcggg cggacccac tggagctggc cgtgtctctg ggaaacctgg agtctgtgag 420
agtgtctcct cgacacaatg ccaacgtggg caaagagaac cgccagggct gggcagtcct 480
gcaggaggca gtcagcactg gagacccga gatggtgcag ctggtgctcc agtatcgga 540
ctaccagagg gccacgcaga ggctggcggg cattccgga ctgctcaaca aacttcgcca 600
ggccccgat ttctacgttg agatgaagtg ggagttcacc agctgggtgc cccttgtgtc 660
taagatgtgc ccaagcgatg tgtaccgct gtggaagcgg ggtgagagcc tgcgagtaga 720
caccagtctc ctgggcttcg agcacgtgac ctggcagcgg ggccggagga gcttcattct 780
caagggccag gaggcaggag ccctggtgat ggaagtggac catgaccggc aggtggtgca 840
tgtggagaca ctggggctca ctctgcagga gcccgaaca ctgctggccg ccatgcggcc 900
cagcgaggag catgtggcca gtcgcctcac ctctcctatc gtctccacc acctggacac 960
tcgtaatgtg gcctttgaga ggaacaaatg tggatatctg ggctggcggg ctgagaagat 1020
ggaaactgtt agcggctacg aggccaaggt gtacagtgcc accaacgtgg agctggtgac 1080
acgcacacgc acggagcacc tctctgatca ggacaagtgc aggagcaaag cggggaagac 1140
tccattccag tccttcctgg ggatggcgca gcagcattcc tcccacaccg gggccccgt 1200
gcagcaggca gccagcccca ccaacccac agccatctcc cctgaggagt acttcgacc 1260
caacttcagc ctggagtcac ggaacattgg ccgccccatc gagatgtcca gcaaagtaca 1320
gaggttcaag gcaacactgt ggctgagtga agagcaccgc ctctccctgg gtgaccaggt 1380
gacccccatc atcgacctaa tggccatcag caacgctcac ttgccaagc tgcgcgactt 1440
catcactctg cgccttcac ctggcttccc cgtcaaaatt gagattcccc ttttcacgt 1500
gctcaatgcc cgcatacct tcagcaacct gtgtggctgt gatgagcccc tgagctccgt 1560
gtgggtgccg gccccagct ctgctgtcgc cgcatacagg aaccctttcc cgtgcgaggt 1620
ggaccccacc gtgtttgaag tgcccaacgg gtacagcgtg ctgggcatgg agcgcaacga 1680
gcccctccgg gacgaggacg atgacctct gcagttcgcc atccagcaga gcctgcttga 1740

agcgggcact gaggcggagc aggtgaccgt ctgggaagcc ctgaccaaca cccggcccgg 1800
tgcccgccct cctccccagg ccacggttta tgaggaacag cttcagctgg agcgggcccct 1860
ccaggaaagc ctgcagctgt ccacagagcc caggggcccga ggatcccctc ccaggacacc 1920
cccagccccc ggtccacca gctttgaaga gcagctgcgc ctggccctgg agttgtcttc 1980
acgggagcag gaggagcggg agcggcgcgg gcagcaggag gaggaggact tacagcggat 2040
cctgcagctg tctctactg agcactgagc catagccccg ggagggtctg ccaggccact 2100
ccctgcccac ttttgtaatt tatttattta taaactctct gctgctgagc ttggggcctg 2160
gagccccagg aatgagcagg caggggagac tgagatggaa ataaagagac tgtcgcagc 2219

<210> 335

<211> 3073

<212> DNA

<213> Homo sapiens

<400> 335

acattagctg ctcctttatt gcaccgaac ctgggcgac tgaaaagcca ccgccccac 60
cccaaactgc gagccgcgt cctggcgac ccgcctccg ccggcctagc tgcaatgacc 120
gcaccggccc gaaggtctcg gtctctccga cccgggatgt ggagcccgaa agagtgggtg 180
gaacccagc ccgggaggga cgcggccgcc gctcgggcca gatcccctta tccaggccac 240
ctttggaac cagcccact gctacacaa ccttttcca acaccgtgtt cccacccta 300
ccttcgctgc tgaaaaaccg cattgtgtgg gggctctggaa tcttctggac tcctgggacc 360
ccaatccgt tgcctcttgt acccctcttg cagagcaatg aggtatgttt tgggtttgtg 420
tactgacccc tacctgcctc ctctgccaga cctgagggca ggagccttc tctgggtatt 480
ccagttcatc tcggaccttc gaagtcctag gagacaccgg gctcccgtg aatatcggtt 540
gaatgacttt ccatagagca aatggggtat acatgattgt gcaatgtgga ggggaatggt 600
ttgggcccct cagaggagtt tagagattag gaggattcca gaaatgagta acacagggtc 660
agtgggggta gagccagccc tgacattctg ggctccaatc tttctgcca atcccctact 720
gagcccccat gctggggcaa ggcagacact ctgggggtct cccaccccc agtcagctgg 780

gccagcatct tctcacctgg agctgaaagc agctgattcc cagagtctgc tccacagagg 840
gaataacctgt cttcagagca taatctatat gctaccatga tcctcaattc ctgtttgctg 900
cttaaacagc caggggtccag gtttattctt tctcagtgga tagggaaggg atcattctgc 960
caaaaatctg ctttccctca gtttagggaa tattccagac aaagaagagg gaaacagcat 1020
ttcatgaatt gccacaataa ggggaccctg cagacccaaa caaaacaggt taaaccttaa 1080
cacaggagaa gaattcgctt aaacccccaa agactccatt ggattcactc tggattgttt 1140
tggtaccccc attcatttcc agattatttg tataagcacc agcattgact ctcaggccag 1200
agttccttta gagaaaaggg tctgacactg cttgaaacac gttaacttgg ccagcagtgc 1260
ggatcatttt actgttgttg ttgttgtccc atgaagacct gctactctga cactctgtgt 1320
ggaattcaga gtgtttcttc tcctatggaa gtggactatg ataaacggcc tcctgccacc 1380
caggctaagt caggactgcc cacttggttt ttacattttg ccctgggcca ctgtctgcag 1440
taacagcgac aataaccatg acaataaata ccataagccc ttaccttggt cctgggtcca 1500
ggctaagagt ttatttcatt tcatttatta ctcacaatct ttctaggtag ctatgtcttt 1560
accccgattt tacataacag gaaaatgagg ccagagaag ttaagtaacc catccaaagt 1620
cacacagcct gttttggagt gatcaggatt ggaacactgt ccttttgttt tgttttgttt 1680
cttattcaag tctgtcccct taattcctga accaggggggt tcttaaccag aggtcccca 1740
agggctcttt gaatgggctt caggggctct gttaaactca gaaatttata tgtgtacca 1800
ggtgggcaca tttttctggg agcaatatta tataacaccc aggattctca aagcgggtga 1860
ggatccagaa aaggtaaagg ctggaatcag gccactgtag ggaaggagg caagccactg 1920
gggaaggggg atggaagcgg cctcctccca ggcctgggga gcaggaggc agctgcttca 1980
aaattcaggc tgggctccaa gcctgtctct ggacctgcc tgccttttct ggccacaccc 2040
agctcttagg acctcagctg gcaggaagac gtggggcacc atctgagggc aggacactcc 2100
tttggctccc tcctgattc tcccctccc tacttctttt gtgagctgaa ttccttcaga 2160
gcactgtgac aaggtgacca taccacatgc accagcctcc tccaggcact gtaatcctgc 2220
ttggaaggag cggggagtgct ttgccctttg gaagtactgg gggacataga cagaccactg 2280
agtgcagag acaggaaggg aggagaagag acaagtcccc agagatgctc aagtcctggg 2340
tgcccactct ctgcagctc tagaacagcc ttctcttttg gttccaagct tttgctcccc 2400
tcatccaagg gttgggatga tttgtgtccc ttcttttctt ggcacctcct gctctgtctc 2460
tagtgctcaa ctcatttcct gggggaaacc ttctctgccc tgttcagctc ctctgcgctc 2520

cttagcacat tcccctggat gtcactgtca tattgccaag aatgtgttgc tttgtctgtc 2580
 tgtcctgcct ctctctctcc atctgttgtg aacttgggaa ggaaggacct gaatcacctc 2640
 tccatgcccc tatgccagcc cagcatacac caaggggtcc aagcatttgt tgagtaaata 2700
 aactaaataa ataaacaagg gacaaaaatg gagccagaca gggaacttag cctgtgcctc 2760
 agagagagga ccaggggtag gtgtatttgt tttgccagct gcctgcagat gcgtgcggtg 2820
 ctctactgc tcacaccaat atactcagag gggcccagaa gcctcattct ctaatgcttt 2880
 ttggctatgg agtgagtttc ctgggttgtg gaccagctg tgggtggtgtg gtctgactta 2940
 gtaatgaact tccttcattt gctttttttg tttgtttttg agatgaggtc tcgctatgtc 3000
 acccaggatg gagtgcagtg agccgagatc gcgccgctgc actttagcct gggtgacaga 3060
 gcgagacgct gtc 3073

<210> 336

<211> 2604

<212> DNA

<213> Homo sapiens

<400> 336

ctgcaaactg cacctttcat gtgtaaaagg attgctacta ctttacttgt cagctgtgga 60
 tttccaaatg tgggtggctcc ctcttatttt tttttctttg aggagtgtac caatttttta 120
 tctttataaa ccaggttaagg gaaatgatgc ccttgcccat tttctacaga cctaategat 180
 ttttacctaa tcagttttac agaaagggtt acatggaaga agagataggg gccaggaatg 240
 caagaggggc attggtgagt ggggtaagaa tccccgtagc cctgggaaag gtgtctccac 300
 ttccacatct ggcttttcta gggggcatct gtgctaactg acctgggatt atgttggatg 360
 gcatatgact gcaaattcaa agaaaccaat ttataataag tttatagtaa gttaaagggtt 420
 tgttttactc tcatgtgaag ggaatctgga ggaaggaaag ccagggtctgg agtggctgcc 480
 tttgatcatg ggagcacact ctttctgccc gatcattggg agcacactcc ttctgcctga 540
 tcgttgggag cacactcctg cctgatcatg ggccgcacgtt ctttctgcct gatcgttggg 600
 agcacactcc ttctgcctga tcatgggagc acactccttc tgcctgatca ttgggagcac 660

gctccttctg cctgatcggt gggagcacac tctttctgcc tgatcggtgg gagcacaccc 720
cttctgcctg atcattggga gcacactcct tctgcctgat catgggcaca cgctccttct 780
gcccgatcat gggcacacgc tcctttctgcc cgatcggtgg gagcacactc cttctgccc 840
atcattgggc tcacgtcctt tctgcccgat cgctgggctc acgtccttc tgcccgatct 900
tgggcgcacg ctctttctgc ccgatcggtg ggcgcacgct ctttctgccc gatcggtggg 960
cgcatgctcc ttctgcccga tcgttgggag cacgctcatt ctgcccgatt gttgggagca 1020
cgctccttct gcccgatcgt tgggcgcacg ctctttctgc ccgatcggtg ggcgcacgct 1080
tcttctgcct gatcggtggg cgcacgctcc ttctgcctga tcgttgggcg cacgctcctt 1140
ctgcctgatc gttgggagca cgctccttct gcctgattgt tggaagcacg ctctttctgc 1200
cttcagactc cttgatttta gtgcagtttc catcactgag gctgcctcat gggctgagat 1260
ggctgttgaa gcactgaacc tcacatccac aattcaggca ggaagcagaa ggaagggcaa 1320
tgggcaaagg ggctgtgcct tgcagccgat ccagcctccc tttgctgcag aggaggcagg 1380
gaaatgcggt atttactggg aacattgctg cccctcctcc aaattgaggg tcttggtctg 1440
aaggacaaaa gccagaaagg ataggtggat tagtgcttct taaacttttg cgtgcatcag 1500
aatcaccag aaagatgta aaactcactc ttcaaggccc catcccaga gattcggatt 1560
ctggggattt ggaatctggg gtggggtctg aagaatctgc attttttaac aaactcccag 1620
gtgacataga tggcatcaat tctcaagcca tattttgagt agcactgaca ctcttccaat 1680
agggtggtact ttgacttctc aggggaagttc tattgctctg ataacttaa accaaccaca 1740
ccagaagctc aaaaaacta gcagcctgtg aaaaatgatc accattttcc tagagctccg 1800
agacaactag tggtagtgca acagtaaccc aaaaatgtca atgaaaatat ttccttcccc 1860
agaaactgct tggtttact caggctcctgt cttatgggc ctgtgtctgg ttgcagggt 1920
tgaagtattt cggaagctca gcagaggttg aaccctttcc cctgggggtt ggtgatcttt 1980
gttttgcca tttccacctg gtgaagattt tcatagacaa atatgcttgt ggcacctgt 2040
aattcattgt gccttatgat ggacctctga ttctataagc tccccctag ctagggatgc 2100
acgggggtga tcaagacatg actagatgtg aacctgacct gcagacagtc cacctgaacg 2160
tgcttgaaa tgtctcccga aaaggatgaa aagcctctc ctttagacaa ggaagacaga 2220
gtggagcaaa tttctctaca tagatctcat tcgaaaacaa atttacagaa tgcagaatgg 2280
ctactgtgtg tcttgtgcta tgctaggtct ctctctctct aagtggactc tgaccctgtc 2340
caaaacattg tgcttttgca tgtagctgtg tcgcatttag gccagctct aagaaccgtt 2400

tggaataaa tcacatagag cctttgattg tgaggcaggc ttaaagtaca ttttgtttga 2460
tttgcagagg catggtgagg aatttatatg catggctgtt gtggcagcag cgagatttcc 2520
aaaaagatga atgatgaaat gaaacagact gaagctatct cacaaatgtt aaatggagaa 2580
ataaaaagttg ttatagtcac tgct 2604

<210> 337

<211> 2505

<212> DNA

<213> Homo sapiens

<400> 337

attctccatc cctgcatttc tccatcgcag catccctgca tgcctccgtt ctctgcatcc 60
ctccacccca gtatccctgc acctcttcat cctccattc ctgcatccct ctatttttcc 120
atccctccat tcctgtatcc ctgtgccctc catcctccat cccagcatcc ctccatccct 180
gctctccact ctcaattccc ttcccttcac agacaggctt ttcttgccat cctcagaccc 240
caccagggt tacctgatgc ctttccagct gcacacgggg actgactcac ctctctcttt 300
ctcagtccca aagtcccgaa agagagcatc tgatgtggtc agcttgtgac aaggcgtcca 360
ccttctgtcc atgacacgga ggccagggga aggtctcact gcccagcacc ccaccctgtg 420
ctcccaggcc ttgaatgttc ctctgtctca gcccagtgac tgcgggctgt ggctcctcct 480
ccagcctccc ctcgaggctc tggctttact taggaggccc cgggtgtaga tgccttccca 540
cccaccaggc attgcccctt ttcttggtt cacagactcg ggaataaagt ttctttctgt 600
ttccctctt gcagaaggag atccggttgg cagctaaacc gcgctgggaa caggggcctg 660
agtcctggac tagggctctt tccccggggc tgctgcagat ggggaggagc ctacaccgc 720
ctcccagtg ctaatcagac ctgacaggct ggagaatggc cagtcagcct gaggccaccg 780
cgggacacca cctaggcca gcttctcccc ccaccagagg gcgccagagc ccgccaagcc 840
tcgtaggaga tggcaacagg gcctgtgtgt gccacctagc ggccaattcc gggaatgaat 900
ctcggcacgc tcattacca gcgactctgc ccatcttgac cttttatgtg aagcagaaca 960
gccgcttccg cagtgaactg tcagaaggcg tcgtgcctgt cttgctagtg gggaaactga 1020

ggctcagaga ggcagaagac ttgcccaaga tcacaccacc gggacccagg attcaagcgc 1080
 aggccctgcc aggctctctg tggcctcctg gctgcgagga ggcagccagg gaccaggtgc 1140
 cacccttctg agacacctga gatcccaggc ccgagaggat gaaggcggga ttacctggag 1200
 cgtgtctgaa tgctggagga agaagggcag ctgggagatg aagctgtcag gatgggccgc 1260
 atcccatttc ctgcctcgtt tcagttcaac tttccaacag acctccctgg ctcgtcttgc 1320
 tcttctctaa tggacaaaca aacaggctca gagagggtgt gtgacttgcc caaggtcact 1380
 cagcttggat gctatggaac agggacgtcc actgtcccag tctgtttatg ggaagccgct 1440
 ctgcaactgt cctgaccac ccatgcccc accgctgttt ctcttgccct gacccttgt 1500
 tccctggacc aggggtggcac agctccaggc tcttgggccc tttccgaggg caggcacctg 1560
 tgactgtgtc cccaaagacc tgagtggctg agggggcccc acagagcttg gacttcctgg 1620
 aggacaagga ggggtctgcc agccaccccc accacgcccc cccaggggt cccctggagc 1680
 ttccatgcca gccggactca ggtgggtctg gaggagcacc gtgcctccaa tcagacctg 1740
 agatgtgccc cctgccccca ctgtgccctc cctgcccag gagtctggtt gcaaaccctg 1800
 attaagggga ttttatctcc accagagggc cagtaggtgg gaagtagctt aaacaatgca 1860
 ggtttataat ctcacagttc tggaggtcaa gagtctgaaa tgggcctcat ggggctaaaa 1920
 ccaaggtgtc tgcagggtg tgttccttct ggaggtcca gggcaggaag gggaggatcc 1980
 acttctgtgc ctttccagct tctagaggct gcctgcgttc cttggctcgt ggcccccttc 2040
 tccaccttca agccagcagc ggaggcctga gtccttctca tgccatctct ctgttctctc 2100
 tcctgcctcc tcctccacac tgaaggaccc ctgtgatcac actggcccc ccaccgatg 2160
 acccaggata atccatctcc ctgtttgaag gtcggctgat tagcaacctt cattccatct 2220
 gcctccttca tttcccctgg ccatgtaatg ggattcacag cttctgggga ttaggacatg 2280
 gacatcttgt ggcgggggca taattctgtc gacgacacca agaaacactt ggatgttaag 2340
 gattcaccga aactgttca ggctccaggt gctgggagca gcagtgaaca aagccaacag 2400
 aactgccac cctcaaggag ttcacgttca tgggcgaggg aacagatgag aaaccggca 2460
 atgaaaacat agcctgggtg ggcaacaaga gcaaaactct gtctc 2505

<210> 338

<211> 3100

<212> DNA

<213> Homo sapiens

<400> 338

ttctttctttc	tccctctgcc	ttaatgatgc	tgcccctttc	ctgttcctgg	ttgaagctga	60
agcccgcctc	ccttcgccgc	acacaacaca	ggagcaatct	tctcagccgt	gcactcacag	120
cttggaaaat	aaagggagga	aggagtccca	gccacagggt	agaggaacgg	cctctccaca	180
gagaagctgc	tgctgctgag	ctgaagtgac	agtcaagttc	agcagctgtg	tggggaccaa	240
ggggacacaa	tatgagacca	acagcatgga	cttcaaagtt	ggggcagatg	ggacagtctt	300
cgccgcccgg	gagctgcagg	tcccctccga	gcagggtggcg	ttcacgggtga	ctgcatggga	360
cagccagaca	gcagagaaat	gggacgccgt	ggtgcggttg	ctggtggccc	agacctcgtc	420
cccgcaactct	ggacacaagc	cgcagaaagg	aaagaaggtc	gtggctctgg	accctctctc	480
gcctccgaag	gacaccctgc	tgccgtggcc	ccagcaccag	aacgccaacg	ggctgaggcg	540
gcgcaaacgg	gactgggtca	tcccgcccat	caacgtgccc	gagaactcgc	gcgggccctt	600
cccgagcag	ctcgtgagga	tccggtccga	caaagacaat	gacatcccca	tccggtacag	660
catcacggga	gtgggcgccg	accagccccc	catggaggtc	ttcagcattg	actccatgtc	720
cggccggatg	tacgtcacaa	ggcccatgga	ccgggaggag	cacgcctctt	accacctccg	780
agcccacgct	gtggacatga	atggcaacaa	ggtggagaac	cccatcgacc	tgtacatcta	840
cgatcatcgac	atgaatgaca	accgccctga	gttcatcaac	caggtctaca	acggctccgt	900
ggacgagggc	tccaagccag	gcacctacgt	gatgaccgtc	acggccaacg	atgctgacga	960
cagcaccacg	gccaacggga	tggtgcggta	ccggatcgtg	accagaccc	cacagagccc	1020
gtcccagaat	atgttcacca	tcaacagcga	gactggagat	atcgtcacag	tggcggctgg	1080
cctggaccga	gagaaagttc	agcagtacac	agtcatcggt	caggccacag	atatggaagg	1140
aaatctcaac	tatggcctct	caaacacagc	cacagccatc	atcacgggtga	cagatgtgaa	1200
tgacaacccg	ccagaattta	ccgccagcac	gtttgcaggg	gaggtccccg	aaaaccgcgt	1260
ggagaccgtg	gtcgcaaacc	tcacgggtgat	ggaccgagat	cagccccact	ctccaaactg	1320
gaatgccgtt	taccgcatca	tcagtgggga	tccatccggg	cacttcagcg	tccgcacaga	1380
tcccgtaacc	aacgagggca	tggtcaccgt	ggtgaaggca	gtcgactacg	agctcaacag	1440
agctttcatg	ctgacagtga	tggtgtccaa	ccaggcgccc	ctggccagcg	gaatccagat	1500

gtccttccag tccacggcag gggtgaccat ctccatcatg gacatcagcg aggctcccta 1560
cttccccctca aaccacaagc tgatccgcct ggaggagggc gtgccccccg gcaccgtgct 1620
gaccacgttt tcagctgtgg accctgaccg gttcatgcag cgggctgtga gataactcaaa 1680
gctgtcagac ccagcgagct ggctgcacat caatgccacc aacggccaga tcaccacggc 1740
ggcagtgtg gaccgtgagt ccctctacac caaaaacaac gtctacgagg ccaccttctt 1800
ggcagctgac aatgggatac ccccgccag cggcaccggg accctccaga tctatctcat 1860
tgacatcaac gacaacgccc ctgagctgct gcccgaaggag gcgcagatct gcgagaagcc 1920
caacctgaac gccatcaaca tcacggcggc cgacgtgac gtcgaccca acatcgcccc 1980
ctacgtcttc gagctgccct ttgtcccggc ggccgtgcgg aagaactgga ccatcacccg 2040
cctgaacggt gactatgccc aactcagctt gcgcattctg tacctggagg ccgggatgta 2100
tgacgtcccc atcatcgta cagactctgg aaacctccc ctgtccaaca cgtccatcat 2160
caaagtcaag gtgtgccccat gtgatgacaa cggggactgc accaccattg gcgcagtggc 2220
agcggctggt ctgggcaccg gtgccatcgt ggccatcctc atctgcatcc tcattctgct 2280
gaccatggtc ctgctgtttg tcatgtggat gaagcggcga gagaaggagc gccacacgaa 2340
gcagctgctc attgaccccg aggacgacgt ccgcgacaac atcctcaagt atgacgagga 2400
aggcgggtggc gaggaggacc aggactacga cctcagccag ctgcagcagc cggaagccat 2460
ggggcacgtg ccaagcaaag cccctggcgt gcgtcgctg gatgagcggc cgggtgggcgc 2520
tgagccccag taccgatca ggccatggt gccgcacca ggcgacatcg gtgacttcat 2580
caatgagga ctccgcgtg ctgacaacga cccacggca cccctatg actccctgct 2640
ggtcttcgac tacgagggga gcggctccac cgcaggctcc gtcagctccc tgaactcatt 2700
cagttccggg gaccaagact acgattacct caacgactgg gggcccagat tcaagaagct 2760
ggcggacatg tatggaggtg gtgaagagga ttgactgacc tcgcatcttc ggaccgaagt 2820
gagagccgtg ctcggacgcc ggaggagcag gactgagcag aggcgcccg tcttcccgc 2880
tccctgcggc tgtgtcctta gtgctgttag gaggcccccc aatccccacg ttgagctgtc 2940
tagcatgagc accaccccc acagcgccct gcacccggcc gctgcccagc accgcgtgg 3000
ctggcactga aggacagcaa gaggcactct gtcttcactt gaatttccta gaacagaagc 3060
actgttttta aaaaaaaaaa aaaaaaaga agaaagaaag 3100

<210> 339

<211> 2173

<212> DNA

<213> Homo sapiens

<400> 339

```
aggcgggtgcc tgtcctcagg gcccttgag ccatggggct gagcagaacc cgggaagtgc 60
tgtgatctgg caggaaggag ggaggctggg ttagatttg acgcatatc tccttcccc 120
attttagtaa agtctaattt tttctgata acgaaggcag tgtttgttg gaaatttcaa 180
atgtagaaga tcctcttta gtctttaaaa gtcctctggc agaagccact ctcctgacg 240
ctcagcagtc tggctgtgca ttgctcttgg ggctgcctgg gtggcagcac aggcctatcc 300
tgctggtgac ctgcccacgc ctcccttgca ggtcctgcgc ctgctcagc tcctcacaga 360
ggccaaacac acagccaagt ccatctccga ccagtgtgcg gagagcccgg ctggccactc 420
cttctctca tggctgggct ttagctccat ggacaccagt ggctcctaca cagccaacga 480
cctggacgag atggggcaag acagtgtccg gaagacagat gaatacctgg agaaggccct 540
ggagtacctg cgccagatat tccggctcag cgaagcgcag cttaggcagt tcactctgc 600
cttgggcatc acccaggatg agaatggaaa acagcagctc cccgactgcg tcgtgggtga 660
gaacggactc atccttacgc ccctggggcg gtaccagttc gcaggacaga tggcggctct 720
gtgttcccgg gatgacttcc tcggcagctt ctgtcgtac cacctcacag aacctgggct 780
ggccagcagg cacctgctga gtcctgtggg gcggaggcag gtggccggcc acaccgcgg 840
ccccaggctc agcctgcgct tcttgggcag ttaccggacg ctggtctcgc tgctgctggc 900
cttcttcgtg gcctctctgt tctgcgtcgg gccctccca tgcctgctgc tgctcaccct 960
gggctatgtc ctctacgct ctgccatgat actgctgacc gagcggggga agctgcacca 1020
gccctgaagg tggcagctgc cttcagagca ggctggaggg atttgccaca cagccccacc 1080
cttgggctga gaggacctgg gaagcccctc caggaggga caggtcatc ctcaggcttc 1140
tggagcgggg ttcctgcagc cgcagaggca tctggaggaa acacaacaa gaaaggaagg 1200
cagttgggcc ccagcaaagg agtggctacc agggctcaac agccacgctc tgtgacagcg 1260
cagagctcag cgccggcctt tccctccctc tgccaaggac tcattggcaa gccagctctc 1320
ggggcctttt ttccagtgcc catttggcta ctctgctgca ccaagcttgg gagccagcct 1380
```

gccaaagacc gcctgggcct ggcctcccca ctggctggcc ttgaggtagg cagagtgggt 1440
 tgtggcgcct cctctctctg tgtgggacca ggacgggtggc ttaagtctcc actccaggaa 1500
 agaatcaaag tttctagagt tgtgagaaaa ccagagagtg gctctcctga ttcttcactc 1560
 tggggtgcgt tcttcatgtt ctcccagctg ttccaagact gggccgtaga attccatgtt 1620
 tcaggagcct aagaccctcc cagagcccag gtgcttcacc gcagaccgca agccattgag 1680
 cacatcacc aaagcagtgg ccaacatcgc ggaccctgt gccttgtcac agatgggtgc 1740
 tggtcctcag gcgttgggga cactgctggg tcgatggggc cggattctgc cagtttctgc 1800
 tctgcagcca aagatgggtca gaagcattgt cacttcagta acatcaagtg ctcaaagaca 1860
 tggcaaccgt tcagtgggtac ttaagtattc aaaatataca actacagatt ctctgacaga 1920
 aaccagcacg ggggtcttcac cttcattcac cccacaggcg acatgcgagg gagaacagca 1980
 tctcagtggg gatttccaaa ccaagccttt gttttcgggtg tggggttttg ggggtttgct 2040
 ttaatgtttt tgaaattgta aatgttgggc tttgtatttt gatgtaaact gagaataatg 2100
 gcattttagg gcctgtgacc aaaaatgaag cttgtaacga ccatggatct gaataaacat 2160
 gtccttgctt ctg 2173

<210> 340

<211> 2240

<212> DNA

<213> Homo sapiens

<400> 340

acttccccgc cctcgcccca aaggagcagc agctccttct tgcctctcca ttgccgccgc 60
 cgcaccggcg gagtcctct ctcgcgcgtc tctcctccga tggagctcgg gcgccgccga 120
 cgccgccgct gccccgaacc ctgagcgggg ccgccccggt cggaggaacg cgccgccag 180
 tccgaggcg cagagcgcca ggagcacgcg gagggctggg gcgcgggctc cgggaacgag 240
 aaagtgcagc tctctcgggt cactgggccg gcggcggggg gactatggct ctgaaggaca 300
 cgggcagcgg cggcagcacc atcctgcccc ttagcgagat ggtttcctcg tccagctcgc 360
 ccggcgcgtc ggccgccgcc gccccggggc cctgcgcacc ctcgcccttc cctgaagtag 420

tggagctgaa cgtaggcggc caggtttatg tgaccaagca ctcgacgtg ctcagcgtcc 480
cggacagtac tttggccagc atgttctcgc cctctagtcc ccgtggcggc gcccggcgcc 540
ggggcgagct gcccagggac agccggggcg gcttcttcat cgaccgggac ggcttctttt 600
tcaggtacgt gctggattat ctgcgggaca agcaactcgc gctgccggag cacttccccg 660
agaaggagcg gctgctgcgc gaggccgagt atttccagct caccgacttg gtcaagctgc 720
tgtcgcccaa ggtcaccaag cagaactctc tcaacgacga gggctgccag agcgacctgg 780
aggacaacgt ctgcagggt agcagcgacg cgctgctgct gcgcggggcg gcggccgccg 840
tgccctcggg cccgggagcg caccgtggtg gcggcggcgg cggcgcgag gacaagcgt 900
cgggcttctt cactgtggg taccggggct cctacaccac cgtgcgcgac aaccaggccg 960
acgccaaatt ccggcgtgtg gcgcgcatca tgggtgtcgg gcgcatcgcg ctggccaagg 1020
aggtcttcgg ggacacgctc aacgagagcc gcgaccccg cggcagccg gagaagtaca 1080
cgtcccgtt ctacctcaag ttcacctact tggagcaggc ctttgatcgc ctgtccgagg 1140
ccggcttcca catggtggcg tgtaactcct cgggcaccgc cgccttcgtc aaccagtacc 1200
gcgacgacaa gatctggagc agctacaccg agtacatctt cttccgacca cctcagaaaa 1260
tagtatcacc taaacaagaa catgaagata ggaaacatga caaagtcact gataaaggaa 1320
gtgaaagtgg gacttctgt aatgagctct cacttccag ttgtgacagc cattcagagg 1380
caagcactcc ccaggacaac ccatccagtg cccagcaggc aacagctcac caacctaa 1440
ctttaacatt ggatcgcccc tctaaaaaag cacctgtaca atggataccc ccaccagaca 1500
aacgcagaaa cagtgaactc tttcagaccc tcatcagcaa gtcccgggaa acaaatctgt 1560
ccaaaaagaa agtctgtgag aagctaagtg tggaagaaga aatgaaaaag tgtattcagg 1620
attttaaaaa aatccacatt ccagattatt ttccagagcg caaacgcaa tggcaatctg 1680
aactgttgca gaagtatggg ttatagtaat tgtcacattc ctgcagtatt ttgatgacat 1740
tcaatgttta ctacagtgtc accacctgac tgatgtccta acaatgggtca gtgtgattct 1800
tgctgctctt ccttgttgtg aacagtggat gtgggacagt attttctttt atgttttagt 1860
tgttgttctt tttagaaaca tgattaaaaa ggaaaaaata ttaaataaat aagtgttaaa 1920
tcaaatgga atatctgatt caaacattt tacaagaatg aaagtaaat gtgcatgac 1980
aagcttagta tcttggtttt tgaactctgg tcaactggat atgtttgtca ttttgtaact 2040
tacaaaaac aaaccatcat atcataccaa ctaaaatgat atatggatga agcaacatca 2100
agtaaaattt tagacgatgg ctataggacc caaatctaaa gctgtctaaa tgttaattca 2160

atgaaacaag tattatTTTT gcatgaatac aatgttaca ataaatcaca agaaataggg 2220
aagatctgtt tggtgcttgg 2240

<210> 341

<211> 3094

<212> DNA

<213> Homo sapiens

<400> 341

attcatcaaa agaggctttc gctcccggac tcccctgggc ctcgagcaga aagcgtctcg 60
gccacggaga tacagaaccg ggagccttca aggtcctccg ccactctcag caagccctgc 120
tctcgatgga gaggagatcg ctgggtgatg gatgtgggct tccaggaag gtgctcgcgc 180
tggtcccag cctccgggg aagatattcg agcgcggagc gtaagcgcag ggcacgccag 240
ccccgggagc cgcgggagca ggcgccgcgc gtctctgcac caccgggccg cctcccagcc 300
ttctttcccc agtttgccct cctgcccag tccgggccga gattaattct ctgcacttgt 360
gagtgggcac acacaagttc tccgggcacg atcctttcat ctatttcctt gggggagtcc 420
acctttttaa cgattaacct cctagctacc gcgggcaagg tggcaggatg cgagtggggc 480
ggggaggggc gtttcacacg ttcagaggca ccaaaattag ctgccagtgc taaaaggctt 540
tgctttcttc ggtttttgac aaataaatgg ggtgggatgc ttgcttgcc gcccgctgcc 600
ccagcccag ccttgggctc acttagcagc ctgatgccga gtttcagacg cagtctgtct 660
gcgcttacac ccgggcttct tcgccccctt gccaaagtct gcagcccgat ggatgccggg 720
cgcgggcttt ccctgagcgc tttaacgcag cttaggctaa agccccagag ctcccacctt 780
ctacctctg tttatccgcc cgccccctta ccaccgcca aggacgtgcc cttcagtag 840
agtcggggat cccagcccca gagcggggga gggcgcctcc ctatccctc ctccccgtcc 900
ccgcctcggc tcgggggtttt actgcagcag ccggaggatga cagcgacgcc tcagccgcct 960
ctgttgctct cggagccccg gcttcccctg caccgggaaa gcgccccctc tcgagaggct 1020
ggtccttga gaactgcgaa cgagctgcag aaaaccagat tttaaatgt agaagtcgtt 1080
gggctgcatt cctccgagga ccagtctgat cgcccaggac taagagtggc agcgtatgag 1140

aagttgggac catagagcaa gggggggagg ggagtgttgc agcaggcatt ctcttctgga 1200
aggagtcgct gggagcagtg cggttggaca caagtttgcg taggagtgtt ttccttttgt 1260
caataattaa tcaccggaat tagccaggta gaatttgagt tttagcaaga gtcctgaggg 1320
cggggccgaa cacctaactc cgggaggctc ccaggcgccc ggcgcagtgg gaagctcgca 1380
gcagctgggg aggagccaaa gcctcggcgc tcacctaagc cgcagggaga tacaccaac 1440
tgggagatga ggaaacagca acccagagag gagaactaac ccacacagga tcatttcgtg 1500
aaggagcaag gctgaagaac cagacctgga ctttcttagg acaaacttac tgcagcttga 1560
aggagccaac catggatttg aggcgtgtga aggaatattt ctcttggtc tactatcaat 1620
accaaatacat tagctgctgt gctgttttag agccctggga gcgatctatg tttaacacca 1680
tcttactaac cattattgct atggtggtat acactgccta tgtctttatt ccaatccaca 1740
ttcgctggc ttgggaattt ttctcaaaaa tatgtggata tcacagtaca atttctaatt 1800
gatcctgttc acattcagtg aaatggcatt gcatatttat atgttgctta cagcttattg 1860
atttaggtaa ctattgtgtc ttccttact atctgacctg aaaagcactc tcttctctat 1920
gcactcttat attctgcctt tctgcctgga gtttgaaata catgtctctt tagtttcttt 1980
tgcacatgct acattgtgct ttagaccgga gataatacag tgactttacc tcacaaatca 2040
tattctgtca acacaaatct atgaatttag tttatttaaa atcagaacaa tttcctacaa 2100
aatttttctg gaaaatagac tctaacaga cctaccagaa tcatgcttaa agtgcctcct 2160
tgacacttat tctatactga aggataaatt ttaaaaaatc tttataggct actgtcagaa 2220
gtatcctatc cttgtttacg atgtataaaa agatgtgaat aaattatatg gacccctaa 2280
gtcttatttt ctagtaaact gatgatactg gaaattcttt tacttcaaat gcaaaagaat 2340
aagctggagg caattatttc ctttcataca gagttcatga attgttttaa atgcttctta 2400
aagtctggct ttataaccgt ttaaaatcaa caatgttgat tttagataac caagtaagta 2460
ttataataca aaataatttt aagtgtgaaga aactaaagta taatcaaagt aaattcagtt 2520
attgtatttg tgggtgttgc ttgccttgca tgatgctggg ggaaaaagag aaaagaaatg 2580
gttttctttt tgtactttca ttcagtgtag agggaaaaaa gcatgtattg ggccaccgga 2640
agacaagcta ataaataggc tggaagtaat attctaccag caggaactca acagctccag 2700
ttaaatgctt tgatatagtg gctcctttgc agagccaaaa caagatttat taaatttcct 2760
tcaaactgtt tatctttaaa acaaatataa ggttttaatt atactgctga agcaaagtgtg 2820
aatgccaaag actacgtttt gcagttttgc tttcctccca ataaatatta atgtatgtaa 2880

ttctagaggg taaaaatgta aataggtttg gacaatattt gcacccttgt ttgtgttatg 2940
aaaaaaattt ttccaaggcg agctagagag aaagatgttt ggcatgccaa attaacttgc 3000
atgtttgtta aaaaaacaaa cacatgtttt gaagagaaac cagatctgaa catgtatttg 3060
ttgagttttg caaaataaaa ttaattttgt aagt 3094

<210> 342

<211> 2183

<212> DNA

<213> Homo sapiens

<400> 342

cacatttgtc ctgagtcacc tgtccagagc aggtggtgaa tatttgttcc tactcacggc 60
atctcaacta tcggagcctg ggatctgact caaaggccgg cctccgtctg agaactgagc 120
gtccatttct caatccttgc cggctctgac ccaggcctgg gccacaggct gtccgggaat 180
aagtggtgct gcaatccctg ctgggcagat ggagagagga gcaagggaga tggcagcccc 240
gggggactgt gcatagggag gtaggtgggc accagggact catgaagtgg cagctaagcc 300
ctgtccagtg gccaccgctc agccaagggc cagagaccag gaaaggaaga aaggcagctt 360
cacttcctct ttgaggatgg agtcgcacag ccgcgtgga aagagcagaa aatctgcaaa 420
atttcgggtcc atctccaggt ccctgatgct ctgtaatgct aagaccagtg atgatggctc 480
tagccctgat gagaaatata ctgatccctt tgagatttcc ttggcccagg gcaaggaggg 540
aattttccac tcatctgtgc agctggcaga cacatcggag gctgggcca gcaagtgttc 600
tgatctagca ctggcctcgg aggctgctca actccaagca gctgggaatg atcgaggcaa 660
gacctgtagg aggatattct tcatgaagga atcttcaca gcttcctctc gagaaaagcc 720
tgaaaaacta gaagcaciaa gtagtaactt cctgtttcct aaagcctgcc accaaagggc 780
acgcagcaac tcaaccagtg ttaatcccta ttgcacaaga gaaattgatt ttccaatgac 840
caagaaatct gcagcgcca cggacaggca gccttactct ctctgcagta acaggaagtc 900
cctctctcaa caattggact gtccagcagg aaaggctgcg ggaacttcga gaccaacacg 960
gtccctgagc acagctcagc tcgtgcagcc atctgggggc ctccaggctt cagtcattct 1020

caacatcgtg ctgatgaagg gccaggctaa ggggtctgggc ttcagcatcg ttgggggaaa 1080
agacagcatt tatggcccca ttgggattta cgtcaaaacc atttttgcag ggggagcagc 1140
agcagccgat ggaaggctac aggaagggtga tgaaattctg gagctcaatg gtgaatcaat 1200
ggctggacta acacatcagg atgcttttga gaagttcaag caagccaaaa aggggctcct 1260
caccctcacc gtgagaaccc gcctgacggc gcctccttcc ctgtgcagcc acctgtctcc 1320
cccactgtgc cgctccctga gctccagcac ttgtatcacc aaggacagca gctccttcgc 1380
cttggaaagc ccctcggtc ccatcagcac cgccaagccc aattacagaa tcatgggtga 1440
ggtttctctg cagaaagagg ccggcgtggg cctgggcacg ggcctgtgca gcgttcctta 1500
cttccaatgc atctctggca ttttcgtcca cacgctgtca ccaggatccg tggcgcacct 1560
ggacggacgt ctccggtgtg gggacgagat tgtggaaatc agtgattccc ctgtgcaactg 1620
cctgacgctc aatgaagtct acacgatcct gagtcaactgt gatcccggtc cagtcccat 1680
cattgttagc cgacatccag acccacaggt ctctgaacag caactcaaag aagctgtggc 1740
ccaggctgtg gaaaacacca agtttggaaa ggagaggcat cagtggagtc tggaagggtg 1800
caaaaggctg gaaagcagtt ggcacgggcg gcccaccttg gagaaggaa gagagaagaa 1860
ctcagcacc cgcacgcga gggctcagaa ggtcatgacc cgctccagca gtgacagcag 1920
ctacatgtct ggggtccccag ggggaagtcc tgggagtggc agtgctgaga agccgtcctc 1980
tgacgtggac atcagcacac acagccccag cttgcctctg gcacgggagc cagtgggtgt 2040
ttctatagca tcctccaggc tgccccagga gagccccacc ctcccagaga gccgggacag 2100
ccacccgccg ctgagactga agaaatcctt tgagattttg gtgagaaagc ctatgtccaa 2160
tatagcgaga cccggttctc cag 2183

<210> 343

<211> 2224

<212> DNA

<213> Homo sapiens

<400> 343

aatctgttga taactcggtc ccagctcggc cgctgccctc gcgaatggag agcgggtccc 60

cggcgggggg agcgcagcgc gtctgtctcc gggagcgcgg cccggccgcc ccggcagccg 120
cttcggccac agcagatggg agcagctccc ggactgcgcc cgccccgccg cggtcaccct 180
gaggccaggg gcccgggagc gcgacctcct ggccgccgtc tgggactttg acctccaga 240
ggccatggag gctggcgggg agcagggcgc cacctgatcg cctccccctg gacgcctcct 300
ccagcggcgc tcacgttcc gtaactttgc agcgtcatg gatctgaaga cagtgtcttc 360
cctgccccgc taccagggg agttcctgca ccccggtgtg tacgcgtgca cggccgtcat 420
gtgtgtctgc ctctggcct ccttcgtcac ctacatcgtg caccagagcg ccatccgcat 480
cagccgcaag ggccggcaca cgctcctgaa tttctgcttc cacgtgccc tgacctttcc 540
cagtgttcaa tgttgtgtgc ttgcgttcta ctccgggggt ggcggcggca ggtctgtccc 600
cagcattctc gctctgggca gaacctcgg gacctccgc tgtcgtgtgt ctgagccacc 660
cctgcagctt cacagggccc ctgcacacct ctgccactc agtgtgccct gtcagccctg 720
tccttgctgt agccccagcc ctgcagggt gagagcacca cagatgctgg gggctgtctt 780
ggactttggg gatggctgtc agcctcagag ggccaatggg gggctttcac gggcccaagg 840
cttgggaaaa tgcccagaca tcctttagtg aagactcgac ttccaaaacc agccaccgt 900
gggactggat tccactccag tataggcact tagcaacacg aaggtttatt ccaaaaagaa 960
aaggggctga cagacgggag attctcatgg acaaaatccc tttccctttt tctcgtctcc 1020
atgaacatct gggtaccaag ccctgactca aaggacagat gtggatgaca gcaagacttc 1080
tgtgaaagca agtggcccgt ccctaggtgg gagggagtcc agagggtcat gggtgtgaaa 1140
ctgtgcacag ctttccctcc ctccctcttc ctcttgtct gtgacacatg tgcaccaca 1200
cacacacaca caaacacatg tgcatatcac acacatgcac acacacaaac acatgtgcat 1260
atcacacacg cgcacacacc caaacacgtg catatcacac acatgcacac acacaaacac 1320
gtgcatatca cacacatgca caaaaacgtg catatcacac acacgcacac acacccaaac 1380
acgtgcatat cacacacacg cacacacaca aacacgtgca tatcacacac aaacacacgt 1440
gcacacatac ttaacacaca cttgcacctg ctgtgcacat gtgcacacac acgtagtagt 1500
gtgttttcca gccaccaca cactgggttt gcattggaga ttgtttcacc ctgcaaactg 1560
caacgtcagc agactcgtcg gtgcgtgtg ctatccggtt gggaggtctc accaggagca 1620
gagcctccct aacgtgcacc tccgagaaga ggggtgtcgg ggagtgttcc cagcacctgc 1680
tcggtggaag ggctctccgg agactggcac tcagtatctg agtatgagga gcctcacttc 1740
ccggggtgtc ggtaaacttg accgtgactc agtaaccac agcgtgctcc tcccagcaaa 1800

ccccgtgtgt ccttacaggt cgaccagacg ggccgtcgga ggaccaccag gtggctctgc 1860
ctctgcctca ccttctcacc tgcttccata gctgatgtga acccgaatcc ccacgctgtg 1920
ctgtgtacgc actgtaggtg cagaaccgtc cacacaaaaa tacagtcttg gcattgtttg 1980
ttctttgtga ggctggttaa tagcatcccc gtgtgttttt ctcaccctcg atggggtaga 2040
ggggcacctg aatgtgtggc ccccgctctgt gtcctggatc ctggggcagg gctgctctcc 2100
ctggccccctg cagccccctca tgaactttcc accctcagtg cccccggctg agcagagagg 2160
cgccccacca ttcaacaaaa gaaagtcaac attgaacatt aaacctctgt gcgtttctat 2220
actg 2224

<210> 344

<211> 3597

<212> DNA

<213> Homo sapiens

<400> 344

tatctgtaaa aaataaaaac aggaaaaaga aaacctctt gtttaggaaga ttatgtttta 60
tttaaggaga agccctggtg ctgagaatcc cacagcctcg ttttctgggc ctatgctaca 120
gggttttgtg caacaggac tgtggatcat attggtggaa taactactgg ccctacatag 180
tctcttttgt ctcttgtggt cagaaggtta gaaggaagga gagatcatcc ctagccctca 240
gtgtactcat ggtggccagg tgaggagggc agatatagag tccctttgag gagaagaggg 300
cctgccagcc caggtacaga tgcttccctc agggccaat ctccctgatg tccccgccca 360
tgccacaca ctgagccttg cttctgatcc ttggaggcta gatagttcca gaatggccac 420
acgttggcga gggcttagtc aaccagctct gactgcatct gcaaggatgc agtggggaat 480
tcctgactga cgggtctacc actggacatt ctgaggtttc ttctccgtg ccacatcctg 540
ggtaaccct ggattgtctg atgatatagt tcttgatgct gataactggg gtgctagggt 600
atctcctctg cacaccttag tcatgactca ggtggggcct gagcactttc tctacgcacc 660
ttctctacaa ccctggtggg ctgggacact cctcttaat gccttagtca gtgcctggtg 720
ggaccataga tgttgcaggg tgtttggaa ttggacagag atcctggtgg aaaagggact 780

agatgaacca taaagaggag ccagtgccttg ctggggacag aagatggagg gtagaaaatt 840
cagtctgtgg agcagtcttg gagagaaatt ggcaggcacc cagtacctcc cttggtcgaa 900
ggctgctcca gggtagtaca gttctctggc cagccggtct tgccaggcaa gtgcctgagc 960
cctgaggaag caagaaggct ctctacctgc agtcagagtc tgctctggga gaaagtacac 1020
agtgcgttgt gatccccctt aatctctcta ttttctgttt gtagaaagtc catgagatgc 1080
tgaagaaggg gtgggatgct gaaggttctc ccttccgagg ccagcgattc gaccctgcca 1140
tgttcaacat ctccccgggg gctgtgcagt tttaatgacc agaaggaaag gaaaccctcg 1200
ccggtgggga gccagagcct tatcctcggc tgcccttctt ggctccctgc attccaggga 1260
cttgctcgtc ttgtttaccc ctagccatcc tttctttcaa gggatgaacca ggccttccac 1320
cctgaccttg catctccaga ctgttccaga gaagggtcgg ggccagctgc tatgtggtgg 1380
ccgctgtggc tgacactgag tgaaggtgtt tgaaatgcag gagaggatat cccagcaaat 1440
tgggatcaca tgcttttgtc tccacagcaa ccagccactg cgggcagcat gtctttcctc 1500
ccctgctctc tgcttgctgt tgttttgacg ctattctgct tgcatgtctt ctggttggga 1560
tgtggagtgt ttgctggact ctcaggcgaa gctgaagtca ttgaagtgtg tgaagctctg 1620
tgcttgcatg agggcaagca aggaatggct gtgcctgagg ctgctctggg aaactccttg 1680
ccccctgacc tcttttgaga gcattcacgt ggtcttcttg ctcatcccct tataaatgtg 1740
ctttgcctgc ctcagcctca tggtcagagc agtggagact ggagccctgt ttgcacgttc 1800
tagttgttcg gagaaagcct aggttctggg ctcagggtcca gatgcagcgg ggattctgtt 1860
ctctgaccgt ggcgaccttg ctttggttct tgttgaagtg aaccaagccc ggccaccacg 1920
catggcatgc tgtgcttggc tccccataag acgtcctctt tgggtgcacg gtgtcaaagt 1980
gtgggcagga gtggagagct ggtgcctca ggaggagacc acagcatgtc catcagctca 2040
gcagagctcg acagccacaa gtcctgagaa gctttgacct tgaagggtt ctgggagagg 2100
aggaatttct gcatggggcg tgaaggcaca ctgtcccacc acaactgaac cagaagagag 2160
tgaagactcc cctcttccca tcctctgtgc caggtgccag actgtgctcc ttggaactta 2220
tggcccaatc ttacctgttc tccagggact ggtcactgcc tcaggacccc caagcctatg 2280
ccctgagcca tggctgctga ctgactccag ccaaggtgca aagacgagat tatgagacag 2340
gtcctcaggc ctgtgttcca agtactcaca ggggctctgg gtgcccacg ccgggagtat 2400
ggttcagctg ccaccggcac tgtccatttg cctgtctgtc aagctcagag catggataag 2460
ccacacagca gggcagtgca ccctggcacc atgcacggcc agcaagaatc aaggcccgc 2520

gatgctaaga gggcctattg tcaggggaag gtccccgctc ctgcacactc tctatggata 2580
cttgggttgt gggggctctc ttggagagta agtttgttgt ttgtttctgg tttacagtgg 2640
tggtgacac cccttgtaag aaagcattcc tgggaagtct tctgtgggtc caaacatgtt 2700
gtccgatca tcacaggaga gcaaaaggcc ctagataccc cctttggaat gtgagagtct 2760
tgttgtctga tatttgccac tgagctgggtg aagcccctct aaagagatct cgaccctggg 2820
gagcagaatt ctgtcatct atgaggggtc ctgagaaaga ctgtcattt ttttctctgg 2880
agttcttccc attgagggtc taggatttgc acaccactgt cccacaagag ctttctctgg 2940
taatgaaagg aggtcttgtg gtgtgtgtct cctctcttct ctatagttcc cgagttggcc 3000
cccatgacg cccccaccct gtgggtagtc ttccagaagt gatgcagtgg tgtgagatgc 3060
cctacacctt gttatttggg agactttgag agtcattcac ttccatgggtg actagtgttt 3120
gttttgcctg attttatatt ctgtgttgca tttctcccca ctccctgccc tgctttaata 3180
aacagcaaac caatatctag gaagaatgac tgagggatag tattgggtat tggcccatg 3240
gcaggaacag ccacttgcac ctgggtcccg tgccacactg cgggtgcttg tgtggttgtg 3300
gagcctgtcc ctgcgcgcct tgctcccgtt gagccacgct gtctggtggg tgattctctg 3360
ccctgagcca ccaccctgga ctggcccagt ctccagagct ggcacaccct gcctgttttc 3420
tctttttaga cacaacagcc gcagtttggc cagccactaa gtcccaccag ctgaggtccg 3480
aggaaagcgg ggtgactcat ttcccttgct cagggccga ggagagttag gtgtccagcc 3540
tgcaaagcta ttccagctcc ttggtgttgg tttgcaataa attggtattt aagcagt 3597

<210> 345

<211> 2543

<212> DNA

<213> Homo sapiens

<400> 345

caatacagtg gagtgatgta acctggagtg ctggggaggg ggctttgaat ggaactgggt 60
agcaggggtc atgaagaatg atgcccagtg gctcaaggca ggaaaggagg ccagtgttgt 120
gggggcccagg tgggtcccagg taggggatgc agataaggct gggggtcgct gggttttccc 180

taaggatgca gtgggatccc agaccttgcg ggctttgagt cccagtccag atctcaggtt 240
ctgtcctgat gggggccctga ctcatatgga ctggcaaagc ttccgggatt tggaatctca 300
ggatctgccc agcccttgtg cctggacaca gcacataagt gcgtccactg gtctctctct 360
tccactgcct tctgtcagta gaagccacca atcgagaaac agggagtttt gatgttacac 420
tggtctgctc tggagtttta tatttattag actgaattgc actttttatc ttcttaagaa 480
ggactaaaaa agctgcgagg cctggcaggg gatcagggag gatgagtgtc ctgagcagag 540
aggtaggggtt accaggtatt tctgtttgcc ttgaactggc cacatagccc cagtgccctt 600
cagcagagag acagggtgaa tgaaggagct ggtgtagtca gtcctagagg agacacacag 660
atgcctctga gaaagccggt tgcagatgac acacgcccg gctcagtgc ggtgacctgt 720
gggcatggaa agtagtaciaa ttcagggatg ttgcttattc gcttattatg tatttataat 780
ggtgtcgtat ggaatatattt attgaaaagg ccagaaaggt cttctttacc cacgtgtttc 840
tggtcttgcc ctgggtgaat ggagtgcctg catctctccc tcttagctgg gaccacacag 900
gagatacttg catgcctgtc ccttactgc tagtgagaga gtacagatgg tgagaaaaga 960
caccagtcgt ggaccatgtg cggtggctta tgcctgtaat cccagcactt tgagaggctg 1020
aggcgggcag atcacttgag gtcaggagtt cgagaccagc ctggccaaca tggtgaaacc 1080
ccatctctac caaaaaaag acaccagccg tacgtctagg actgacacat tgtcattatc 1140
atggacgcta atcacaaggt gtcgtgtgca gtggcgtgca ggtggtgtgc acgcagatct 1200
gcgaacagcc cacctgcacg caccagcata cagatgagct caaagatcgc tttcctaggg 1260
caccgtcaca agcactgcaa cctgtgtcca gctgcacaaa agggctgaga gagtggccgc 1320
ggctctgatg gagaagggaa gactgagtgt tggggacat gtggctctgg tctaccacc 1380
agggtggac ctcatcgccg cgttctatgg ctgctgtac tgtggctgcg tgcctgtcac 1440
cgtgcggccc ccgcaccctc agaacctcgg caccacactg cccaccgtca agatgatcgt 1500
ggaggtcggc aagtctgcat gcgtcctcac cacgcaggct gtcacacggc tgctcaggtc 1560
caaggaggct gctgctgccg tggacatcag gacctggccc accatcctag acacagatga 1620
catcccaaaa aagaagatag caagcgtttt caggccccc tccccgatg tctctgcata 1680
cttggacttc agcgtgtcaa ccactgggat attagcggga gtgaagatgt cgcacgcggc 1740
cacaagcgcc ttatgccgt ccataaagct gcagtgtgag ctgtaccct cgcggcagat 1800
cgccatctgc ctcgaccct actgtggcct tggttttgcc ctgtggtgtc tgtgcagtgt 1860
ctactcggga caccaatcag tgctggtgcc cccgctggag ctggagagca acgtgtccct 1920

gtggctgtcg gccgtcagcc agtacaaggc ccgcgtcacc ttctgctcct actctgtgat 1980
ggagatgtgc accaagggcc taggcgcaca gacgggtgtc ctcaggatga aggggggtgaa 2040
cctgtcatgt gtgcgcacgt gcatgggtgg cgccgaggag cggcccagga ttgcgctgac 2100
ccagtccttc tccaagctct tcaaggacct gggcctgccg gcccgcgccg taagcaccac 2160
gttcgggtgc aggggtcaacg tggccatctg cctccagggtg aggtgcctgg ggcctgcggt 2220
tctcgaaagc tggctgttgg cagcatggag acccagtttc ccagttgtta atgtgccgtt 2280
ttgtagccgc ctgatctatt tctccttctc tgggcctttg atatctcatt tccatgtaac 2340
attttagctt caagggtttt atttttaag atgttctatt ctagttggag aaaggcttat 2400
ttggaaaaaa aacacattgt ttttgaacag tgactaataa ctgtaagact ctctaagtta 2460
gatataaaac acagctaagt tcttaaagca agattgaact tactgtttta agatatctag 2520
caatattaaa ttgaaacatt aat 2543

<210> 346

<211> 2557

<212> DNA

<213> Homo sapiens

<400> 346

ctgatatttc agggagttaa acaatatgat aatagttgtg tcccagaggt agacttttgt 60
aaacagattt aaatttaacc ttgaccttgt ttttaacaca ttttatttta cttacttttt 120
gaaaatgttc attttctcca acatcataca atgcaatgaa gctaacataa cttggcttag 180
gtagtccctt accttggaat tgctaaataa attatatatt aagtaaattt ggtggacttt 240
gtgataaagc tgtaaggta gttgggttga tattcttttg aagcaaggct ttttttattc 300
ccaaagattt ctttagcaaa atttgcacat tttaaataaa gcagccggga attcttatgt 360
aggggcttcc tgcattggcg aaaacagcac atgtctaaca aatttaaagg cttttttttt 420
tcagtgcac agtacatcca tcttttcaca accatctgtt atccggcagt accatctctt 480
atttccagca agctttccac atgcgtgcaa cttactgccg tttccaataa gggtaatcaa 540
tcaatacaac cctttcagct ctcaaacttt aaaataaatt gccttttaat gagactttta 600

aagtcacac tattagcaga ttatacatca tagttttcca accagtacct aatgtatgtt 660
gcattagaat attaatttgt tcatcccaat ggtaaaataa aaaaacagct gaggtcttca 720
tgaggtcatt ctaatggagc tgaaagtgtt ccttttagcaa tttttctgtc gtttcatgta 780
ttgttctgtg gtcattgatgt caacatcttt ttcattcccta agaagaagaa acgctagaga 840
gtcggatggc tgaggaagag aaacctgctg ctcttcctga gaaagagtgt ggggctgcta 900
agtcctcaga ccaaccaag ggcctcagta agggccaaat ggagtctagt gcggaggccc 960
aaatagttcc cgaagagagt gccccagcag gggccccaca tgagaaaagt gtaaaagagg 1020
tcaaggaggt gtctccagaa gtaaaaaccc ctctctctgc tggggaaggt gtgtccttct 1080
caggatttgc atgtgttttg ttgcaaatga tctctccagt ggcttaccaa cctgatgcct 1140
ttccaacgct atttcgctat ttcattcgctg ggtcttatga taacaagtcc actgttgtag 1200
gcttaatgtg cagagagtgt ggcttgcgca agtgctgtgt ggcagctggt tttccagtgc 1260
tgcagctgat ttctggtttt cctttgccat gatacaatac gctttgcagc caggctgatg 1320
atgctatgtg agcttctttt tttattttat ttttttaccg gccccctc atctcaaagt 1380
tttgccagtc acattgctaa tacatgtata tttttgtttt tttttgggg acagcaattc 1440
atatgctttt atttcaaac gtacagttgg attttggcac atagaggctt aaatggtgga 1500
atcgtttttg tttgcaaccg aaatgtgcta tttttttat gcttcaatga atactggttt 1560
gattttcttg acctctgtct gatgcttctc atatcatttt ctcccatgg cagccagccc 1620
ttctgatcat ccccatatct cttagatttt cattcatcta acctttatta gaagttcatc 1680
aagtattttt ttttctattg ttacaacagg acacataagt atataaggta atgatgatcc 1740
atacacttgc tcttttagag atgattgaat tttattattt ttcccaaatt cttttccaga 1800
taactacatt tagctctaac gaccacagtg aactactttg accttaaac acaagtggga 1860
caataaagcc ttttggttgg ttgaataaat aaaagtaaaa atgtgttatc taatttctgt 1920
gaagcacctc taaagccaat actggccaat gcttcaccag ttagtcatgc tccaaggatt 1980
gaggctatga ccatgggaat aaagtatttt caatagtga ctcttttgaa aagtttggtta 2040
ctcacatgac ttccagtat caacagtgtg attcagattt tcttatatct accgtacgga 2100
ctaagtaatg attaggaatt taaattttta aatatgtaat agaaactggc ttgtaaattc 2160
ttaagtcata tcatataaaa ttgatagcaa atatttactt atatttctga aattttatct 2220
cagatgaatt ctaaaaattt atgccagtaa cctgtggatg cctaaagaat tggccctgac 2280
attgtttaat caagttaact gcaactatta acattatattc attgtgcatt acttggccct 2340

ctgccccatag cctaccaatt catTTTTTaaa tgataaaacc aatgaaaatg ttcagtataa 2400
atcaattctt tatctatatt tagtccttac tataatgttct tttgtaccct aacattagct 2460
gcttactcaa tattcattag cttataactt ttatgtatag aaggcacttg aatttgtttc 2520
ttctgtaata cacatcacat aatgttttagg agagacc 2557

<210> 347

<211> 3578

<212> DNA

<213> Homo sapiens

<400> 347

actgcaaacg tcaagtggc tccgccttcc ctgggttcgg agcttcactt gctcttgagc 60
tctgcggtcc ggcggatttc gcggggccca ggggatggcg gggagtgaga tttggccagg 120
gtcatttcac actgccgggc ctgcagccac gcacgcagct gctggcccgg ctgaggctgg 180
cggctaggga gaggcgccag ggggtcgcgc acaggaaggt gcaagttctc tcctgttgcc 240
ctgagtcccc actcccaggc cctctgtatg agtgacactt cagtctgcca tggaacctgg 300
ccctgctctg gcctggctcc tgctcctgag cctgctggcg gattgtctga aagctgtca 360
gtcccgagac ttcacagtga aagacattat ctacctccat ccttcaacca caccatatcc 420
tggtggattt aatgtttca cctgtgaaaa ggcagcagac aattatgagt gcaaccgatg 480
ggctccagac atctactgcc ctcgagtgc cagatactgc tacactcagc acacaatgga 540
agtcacagga aacagtatct cagtcaccaa acgctgtgtc ccactggaag agtgcttattc 600
cactggctgc agagactccg agcatgaagg ccacaaggtc tgcacttctt gttgtgaagg 660
aaatatctgt aacttgccac tgccccgaaa tgaaactgat gccacatttg ccacgacgtc 720
acctataaat cagacaaatg ggcacccacg ctgtatgtca gtgatagtgt cctgcttgtg 780
gttgtggtta gggctcatgt tatagtggct cagtggctcc atgtgttaat agcgatccat 840
ggggatctcg atggccaca gacctgcag agtcattggc ctgacagtaa ttacacatgt 900
gagacacaac actcttggag gtcacacag ccaagcattg ccacttacca tgaggaataa 960
atgttgcttc attgtagcca ttttgagtct aaccgagact catcaaagcc ttctgtcagt 1020

acagcccaag ttccatacca taaacgtttg ttttcattcc aagaagtagt tctgcattta 1080
tcgagatctg gggttcttaa tttggaagaa tacatgcatg agatgcagta ggtcctgaga 1140
ctgtaagata ttaggagtat gttatagggg catgtataga tgtgggcttt tcaggagaaa 1200
agtaaccatt ggtttaaata taatcatgag ttcatttgta gctttagaat tttaaaacat 1260
tgactccaaa ctgaatggac tatttccttg gaaattctga ctgagtcctt ggaagagtag 1320
taattccaac aattccagcc atttgttcaa ttaattttcc caacattctt ctcccagtg 1380
tgggaatcac atttcctctg ttctgtgcag aagacaaaaa ggcaatcata aaagtttggt 1440
atatttggtg ggggtgcctg aggaggattt tcctcaactt aatggagcca ctgtccataa 1500
agtggctgtt atcccttcat ataattggtg agatcagcct tctccttgac ttggcaccta 1560
attatgcttc atgagatcct agattccacc tgagtcaatt gtgtccagag ccccaaacca 1620
ggatggagtt gttttcccca gatatggggg tctattcagc catagataat ctagacagag 1680
gatttcagaa tgaaaggaaa aatgtgtgga gattagtcct agttcattct gagggccgac 1740
taagtggctc agccagcttc ttactccatc tgcagttcat actgccaag agctcccact 1800
tccaaatccc cagtgacttt atggagaaga ttctgcatta aattgtcttt cgaatgatgg 1860
ggaagcaagg cataatatgc gatgatgagg agaaagtaga ccagtgaggt gattgcaaga 1920
ctaacaagga gactcaatgg gaagtttttc tttcttttag atattgcttt tgaagtagat 1980
ggtaaaattt ttgtcatcct tcttgtattt tttgtacccc aagttacaat ttttcttctt 2040
ccttgtaaat aatttaacaa gtatttattt ttgtaaggca taactagaaa ctaaaatata 2100
ttctaaaaaa ttcattatc tgaacaaagt gatcaaatta gaatacatat tttcaacag 2160
tggtagagct tttaatatat gtttattgaa agttatctat aatacttgca ccagtgttga 2220
aaaaagttaa catgtaggca agagcaatat gtttgtctca aggatttttc catggtttcc 2280
tcagtgatgg tgtcctggaa ttattcaggt ggtgaccatc actggtctaa gtttgtgtgc 2340
agggttttca gacgtgtttt tgtgaaactt ggtagaacca tggctaataa agaggacagt 2400
gttgtcaggg tccatctgcc ctccatagaa aaatgtctct ggctcataaa atgagactcc 2460
ctcagggact aaatatgaac tgacagcagt aactctgata cagaataatc taaattgcat 2520
caaatggcct taattcagag tttgttaggc ttatcagtat gttgctttta attggggtgg 2580
gaaagtagag ggagagaaa caagacattt attaagcacc tcgtatgtgc caggcactat 2640
gctaagcact ttacataagt taggattaat ccctgcaaga atcctataaa gaatgttact 2700
agcatttaca cttcccaaat gaaggtacca aagctcaaac gcaatgttgt gaagctgttt 2760

ccttcagatt taggttatgt gggatgatgt gggattgaag aggaaagaaa ggtgggatta 2820
 tccccctagg aagactttca ggcctgactt cataggaatt catccatctt atcatgtgga 2880
 gtttatctca ccctgctgtt gcaggatgct atttgcattgt gtccccaggt gatgtttttt 2940
 ctttggggag taggggtttg gcttcctcat tcatccctct tgctaaaaga ggagatagtt 3000
 gatgttgcatt ctaaagatgc tataagacaa tgaaagtttg atgttgtaca tacctacaag 3060
 taccattttt gtgcatgatt acactccact gacatcttcc aagtactgca tgtgattgaa 3120
 taagaaacaa gaaagtgacc acaccaaagc ctccctggct ggtgtacagg gatcagggtcc 3180
 acagtgggtgc agattcaacc accacccagg gagggtgtgc agactctgca tagatgttgc 3240
 tgcattgcgc ccatgtgcct gtcagaatgg cagtgtttta ttctcttgaa agaaagtatt 3300
 ttgctcacta tccccagcct caaggagcca aggaagagtc attcacatgg aagggtccggg 3360
 actggtcagc cactctgact tttctaccac attaaattct ccattacatc tcactattgg 3420
 taatggctta agtgtaaaga gccatgatgt gtatattaag ctatgtgcca catatttatt 3480
 tttagactct ccacagcatt catgtcaata tgggattaat gcctaaactt tgtaaattatt 3540
 gtacagtttg taaatcaatg aataaagggt ttgagtgt 3578

<210> 348

<211> 6040

<212> DNA

<213> Homo sapiens

<400> 348

atgaaggat tcaagagacg atattttttac ttgacccaac ttcctgacgg ttcatatatt 60
 ctcaattcct ataaagatga gaaaaattca aaagaatcga aagggttgcatt ctacttggac 120
 gcctgcattg atgtttgttca gtgccccaaa atgcgccgtc atgcttttga actcaagatg 180
 ttagataaat atagccatta tctggctgct gaaactgagc aggaaatgga ggaatgggtg 240
 ataactttga aaaagattat tcagatcaac accgacagtt tagttcaaga aaaaaaggag 300
 acggtagaaa cagcacaaga tgatgaaact agcagccaag gaaaagccga gaacatcatg 360
 gcaagtttgg aaaggagcat gcatccggaa ctgatgaagt atggaagaga aactgaacaa 420

ctaaacaaac tcagtagagg agatggaaga cagaatctct tttcttttga ttcagaagtt 480
cagaggttgg acttttcagg aattgaacct gatataaagc catttgaaga aaaatgcaat 540
aaacgtttcc tggatgaattg ccatgattta actttcaata tcttgggcca aattggagac 600
aatgcaaaag gaccaccac aaatgttgag ccccttttta tcaatcttgc cttatttgat 660
gtaaagaaca attgtaagat ttcagcagac tttcatgtag acctgaatcc cccatctgtc 720
cgtgaaatgc tgtggggctc ttcaacccaa ctggccagtg acggtagccc aaagggtctt 780
tcacccgaat cttacattca tggaattgcc gaatctcagt tacgctacat acaacaggga 840
attttctcag tgacgaatcc acatcctgaa atttttctag ttgccagaat tgaaaaggta 900
ctacaggga acattacaca ctgtgcagaa ccctatatca aaaattctga tccagtaaag 960
acggcccaga aggtgcacag gacagctaaa caagtgtata gccgccttgg acaatacaga 1020
atgcccttcg cttgggctgc cagaccatt ttcaaagata ctcaaggctc tcttgatctg 1080
gatgggagat tttctctct gtataaaca gacagtagca agctttcaag tgaagacatt 1140
ctcaagttgc tctcagaata taagaagcca gaaaagacca aactgcagat tattcctggg 1200
cagctaaaca tcacagtaga atgtgttcct gtggatttat caaattgtat tactttctca 1260
tatgtgccct tgaagccttt tgaaaagaat tgccaaaata ttactgtgga ggttgaagag 1320
tttgttccag aatgacaaa atattgttat ccatttacta ttacaaaaa ccatctgtat 1380
gtatatcccc tgcaattaaa atacgatagc cagaaaacat ttgccaaggc aaggaacatt 1440
gcagtctgtg tggaattccg ggattcagat gaaagtgcg ctagtgccct aaagtgtatt 1500
tatggaaaac ctgcagggtc tgtttttacc acaaagtctt atgctgttgt ctcgcatcac 1560
aaccaaaatc cagagttcta tgatgagatt aaaattgagc ttccattca cctacatcaa 1620
aaacatcggt tgcttttcac tttttatcat gtaagttgtg aaattaacac aaagggaaca 1680
acaaaaaagc aagacacagt tgaaactcca gttgggtttg cctgggtacc ttgctgaaa 1740
gatggtagaa tcatcacatt tgagcagcag ctgccagttt ccgccaatct tccccaggc 1800
tacttgaatc tgaatgatgc agaatcaaga aggcaatgta acgtggatat taaatgggta 1860
gatgggtgcaa agcctttgtt gaagattaaa agccacttag aatctaccat ttacactcaa 1920
gatctgcatg tgcacaaatt cttccatcat tgccagctga ttcagtcagg ctcgaaagaa 1980
gttccagggg agtcattaa atatttaaag tgtttgcatt ccatggagat ccaagtcatt 2040
atacagtttc tacctgtaat tcttatgcaa ctcttccgag ttctcaciaa tatgacccat 2100
gaagatgacg ttcctatcaa ctgcaccatg gttctcttac atattgtatc aaagtgccat 2160

gaagaaggct tggatagtta tctaagatca ttcataaagt atagcttccg acctgaaaaa 2220
ccgagtgtc ctcaggccca gctgatacat gaaaccctgg ctactacgat gatagcaata 2280
ttgaaacagt ctgcagattt tttatcaata aacaaattgc taaagtactc atgggttttc 2340
tttgaaataa ttgcaaagtc aatggccaca tacttggttg aagagaataa gattaagctt 2400
ccccgaggcc agagatttcc cgagacatat catcatgtct tacattcact gcttcttgca 2460
ataattcccc atgtgactat tcggtatgcg gagattcccc atgagtccag aaatgtgaac 2520
tatagtttgg ctagcttcct gaagcgctgt ttgacactaa tggatagagg atttattttc 2580
aatttaataa atgactatat atctggattc agcccccagg atcctaaggt tctggctgaa 2640
tacaagtttg aatttctgca aacaatttgc aatcacgaac attacattcc tctgaacttg 2700
ccaatggcat ttgcaaaacc taaactgcag cgggttcaag atttttttca tttgcggtgg 2760
accgtttgac ttcagtagat tcaaactctg aatacagttt atcagatgag tattgcaagc 2820
atcacttctt ggttgatcta cttctgaggg aaacttccat tgctcttcag gacaattatg 2880
agatcagata tacagctatc tctgttataa agaactttt gataaaacat gcatttgaca 2940
caagatacca gcacaagaac caacaagcca aaatagcaca attgtacctc ccctttgttg 3000
gactactttt ggaaaatata cagcgattag caggctcgaga taccttgtat tcttgtgcag 3060
ccatgcctaa ttctgcatcc agagatgagt ttccatgtgg ctttacttca cctgccaata 3120
gagggagtct gagcactgac aaagacaccg cttatgggtc ttttcaaat ggacatggaa 3180
ttaagagaga agattcaaga ggttccctca tcccagaagg agcaacagga tttccagatc 3240
agggcaacac tggtgaaaat acccgacaga gtcttacaag gagtagtgta tcccagtata 3300
accgcctgga tcagtatgaa atcagaagcc tcctgatgtg ctacctgtat atagtaaaaa 3360
tgatttcaga agatactctc ttaacttact ggaataaagt atcacctcag gagctcataa 3420
acattcttat acttttagaa gtatgcttgt ttacttttag atatatgggg aaaagaaaca 3480
tagcaagggt gcatgatgcc tggctgtcaa aacacttcgg aatagaccga aaatcgcaaa 3540
ccatgcctgc tcttcgaaac agatcaggag taatgcaggc ccggcttcag catcttagta 3600
gcctagaaag ttcatttaca cttaatcaca gtcttacaac aactgaagca gacattttcc 3660
accaggcact tcttgaaggc aatacagcta ctgaagtttc cctaacagta ctagacacca 3720
tatcattttt cactcagtgc ttcaagacc aacttttaaa taatgatggc cataacccat 3780
taatgaaaaa agtgtttgat atacatcttg cttttcttaa aaatggacaa tctgaagtgt 3840
cgctgaaaca tgtatttgcc tcaactgagag ctttcatcag taagtttcct tcagcatttt 3900

tcaaaggaag agtaaacadg tgtgctgcat ttgctatga ggttttaaag tgctgcacat 3960
cgaagattag ctcaaccagg aatgaagcat ctgcactttt gtatcctttg atgagaaaca 4020
actttgagta taccaaaagg aaaacctttt tgaggacaca tctacagata ataattgctg 4080
taagccaact gatagctgat gtagcactaa gcggaggatc aagatttcag gagtctttat 4140
tcattatcaa taattttgca aatagtgaac gacatatgaa ggcaactgcc tttcccgag 4200
aagtcaaaga cttgaccaag agaatccgca ctgttcttat ggccactgcc caaatgaagg 4260
agcatgagaa agaccctgaa atgctaattg atctccagta tagcttagcc aagtcctatg 4320
caagcaccac agagctcagg aaaacctggc ttgatagcat ggccaagatt catgtaaaaa 4380
atggagattt ttcagaggct gcgatgtgtt atgtccatgt agcagctcta gttgcagagt 4440
ttcttcatcg aaaaaaatta tttcctaacg gatgttcagc gttcaagaaa attactccca 4500
atatagatga agaaggagca atgaaagaag atgctgggat gatggatgtc cattatagtg 4560
aagaggtctt gctggagtgt ctagaacaat gtgtggatgg cttatggaag gcagaacgtt 4620
atgaaataat ttctgagatt tccaagttga tcgttccaat ttatgagaaa cgtcgtgagt 4680
ttgagaaact tactcaagtt tatagaactc ttcattggagc ttacacaaaa attctggaag 4740
ttatgcatac aaaaaagaga cttttaggca ctttcttcag agttgccttt tatggccaat 4800
ctttttttga agaagaagat ggaaaggagt acatctataa agaaccacaaag ctactggcc 4860
tctcagaaat ttccttgaga cttgttaaac tttatggtga aaagtttggt acggagaatg 4920
tcaaaataat tcaggattca gacaaggtaa atgccaaaga gcttgatcca aaatatgctc 4980
atatacaagt tacttatgtg aagccttact ttgatgacaa agaactcaca gaaaggaaga 5040
ccgagtttga aagaaatcat aatatcagcg gatttgtttt tgaggcccct tacactttat 5100
caggcaaaaa acagggctgt atagaagaac agtgcaaacg ccgtacaatc ttgacaactt 5160
caaaactcgtt tccttacgtg aagaagagga ttcctattaa ctgtgaacag cagattaatt 5220
taaaaccaat tgatgttgcc actgatgaaa taaaagataa aactgcagag ctgcaaaagc 5280
tttgctcctc tactgacgtg gacatgattc agctccaact taaattgcag ggctgtgttt 5340
ctgtgcaggt caatgctggt ccattagcat atgcaagagc tttcttaaat gacagccaag 5400
ctagcaagta tccacctaa aaagtgaagt agttgaaaga catgtttagg aaattttatc 5460
aagcatgcag cattgcactt gaactaaatg agcggctaata taaagaagat caagttgagt 5520
accatgaagg gctaaagtca aatttcagag acatggtaaa agaattatct gacattatcc 5580
atgagcagat attacaagaa gacacaatgc attctccctg gatgagcaac acattacatg 5640

tat t t t t g t g c a a t t a g t g g t a c a t c a a g t g a c c g a g g t t a t g g t t c c c c a a g a t a c g c t g 5700
 a a g t g t g a g g a a t g c a g a t g t a c g t g a c a t g a g a c t g a c t t t t c t c a g g a a t t t t g g 5760
 a g c t g t g c a a a t g t t a a a a t t t a a a g a t t t g a t a t a c a t g g a g t g t t t c t t c t c g a c a c c 5820
 a a a a t t t t c a t g t g t t c c a a c a g g g t g c t t a c a t a t t t g t a a t a a g c a a c t t g a a a g t g 5880
 c c t g g a a g a t t g c a c c a c t g t g c t t g g t t t g t a c t t t t t t a g g t a a a t c t a t a t g c t g a a 5940
 a a g t a g a g c t c a a a a c a g t a g t t c a a t t t g c t t a a t t a t t g c t t a a a a t a a t g g t a c t a 6000
 t g t a a a a t t g t a t a a t g g a a t a c a a t a a a g g t a a a a c t t 6040

<210> 349

<211> 3521

<212> DNA

<213> Homo sapiens

<400> 349

t g c a g g g a g g c a g g a a t t g c a t c a g g a c c t a g c c a c a a g g g a a t a a a g g a g c a g c t a c t c 60
 c c t c c c g g t g c a g t g c c c t g c a g g t g t c a g c t g t t a c c t g t g t g c t c c t g t g t c a c a a a 120
 g g a t g a g c t t c t t c a a c t g t c t g a a t a a t c c t g g g t c c c a g a g c a g g c a t g a t a c c c t t c 180
 a c a a t a t c g c a a g a a g a g g g a g t a a a t g c t t a c c c t a g c c a g g c c t c t c t g t c a g t g t g 240
 t g t a t a t g g g a g a g g g c a t t t a a a a c c c t a t t g g t t t t t t t g c c t c a g t a c a c a a a a c a 300
 t t t t t c a a t g a t g a t a c c c a g a t a c a a t t a t c t t a c c a c t g a g g g g a c a a g t t t c t a c c c 360
 t c c t c c t a a g g g a t t c t g a a a g c c a g c a g g c a t g a t t t c t a a a g g a g c t t t a a g c a g g a g 420
 c a a a g c t t a g c t g a c c a t a c g t g t g t g t g t c t c a a a g g c g g c a t a c t g g g g t c t t g g t 480
 g t g c a a c c t g g g a a c a g t g t t c a c a g a t c t c c a a t g c c a g t t g t t c t c a t t t a a g g a a a a 540
 g t c a t t a c c c a g a g t c c a g g a a t g t c a g g c c c c t g c a a g g g a t t t t c c t a t g g c c t g t c t 600
 t t c c t a t g g c c t c t t t t g t t a g c t t t t g c t g c a g c a g t g c t t c a t c a c a a a c a g c c c c a 660
 g a a t t t c a g g g a t g t t t a a t c a g c t g t t g c t c a g c c c t g a t g t c t a t g t g t t g g c t g a t c 720
 t t g g c t g c g t t t g g c t g a t c g c a c t g c t g c t t t t g g c t g g g c c a c t c a g t c a t g a g g g a 780
 t c a g c t g a a c t a g a a c a g g g c a t g g c c g g a g c a g t t c t g c t t c a t g c g t a t c t c g c t c c t 840

cttggggcca gcaagttagc ctgaatacat tcttcttatg gcagtgtcat aaagagggca 900
aggccagccc aaacactttc caaacctttg attatgttct gtctgctgac atctcactgg 960
ccaaagcaag ttaaattggct aagcccaaag tcggtgtgg ggatgcactt tccaacatgg 1020
aggcgatggg gagggagaga atatittaaa caatggtcta atctaccacg cctaccaatg 1080
tgcacaatgg ctgcaaggat ccagtgtgt agcgggcaca cagagcctag ctaccgtgcc 1140
tggcacatag caggagcttg taatgatgcc aggaagactg ccaattcctt tttcttttcc 1200
ttctctcctc ctgcaggctt tcaccagttc tcaggatgcc catagggatg ggtgaagcct 1260
gcctggcctg tgggtgctttc cagtggccgt catctcatta gggccccaca gtggcattag 1320
gatgcacctc tcggcggtgt tcaacgcct cctggtgtcg gtgctggcag cggtcctgtg 1380
gaagcatgtg cggctgcgtg agcatgcagc cacactggag gaggagctgg ccctcagccg 1440
acaggccaca gagccagccc cagcactgag gatcgactac ccgaaggcac tgcagatcct 1500
gatggagggc ggcacacaca tgggtgtgcac gggccgcacg cacacagacc gcattctgccg 1560
cttcaagtgg ctctgtact ccaacgaggc tgaggagtgc atcttcttcc atggcaacac 1620
ctctgtcatg ctgccaacc tgggtctccg gcgcttccag ccagccctgc tcgacctatc 1680
caccgtggag gaccacaaca ctcagtactt caacttcgtg gagctgcctg ctgctgcct 1740
gcgcttcatg cccaagccgg tgttcgtgcc agacgtggcc ctcatcgcca accgcttcaa 1800
ccccgacaac ctcatgcagc tctttcatga cgacctgtg ccactcttct acaccctgcg 1860
gcagtttccc ggcctggccc acgaggcacg gctcttcttc atggagggct ggggcgaggg 1920
tgcacacttc gacctctaca agctgtctag cccaagcag cctctcctgc gggcacagct 1980
gaagaccctg ggccggctgc tgtgttctc ccatgctttt gtgggcctct ccaagatcac 2040
tacctggtac cagtatggct ttgtgcagcc ccaggggccg aaggccaaca tctctgtctc 2100
aggcaatgag atccggcagt ttgcacggtt catgacagaa aagctgaacg tgagccacac 2160
aggagtcccc ctaggcgagg agtacattct ggtcttttagc cgaaccaga acagactcat 2220
tctgaatgag gcagagctgc tgctggcact ggcccaggag ttccagatga agacagtgc 2280
agtgtccctg gaggaccaca cttttgtga tgtcgtgcgg ctggtcagca atgcctccat 2340
gctggtcagc atgcatgggg ccagctggt caccaccctc ttctgcccc gtggggcaac 2400
tgtggtagag ctcttcccat atgctgtcaa tcccgaccac tacactcct ataagacgt 2460
ggccatgctg cctggcatgg acctccagta ttagcctgg cggaacatga tgccagagaa 2520
cacagtcaca caccctgagc ggccctggga tcaggggggc atcacccatc tggaccgggc 2580

tgagcaagcc cgtatcctgc aaagccgtga ggtcccacgg catctctgtt gccggaaccc 2640
cgagtggctc ttccgaatct accaggacac caaggtggac atcccatccc tcattcaaac 2700
catacggcgc gtggtgaagg gccggccagg accacggaag cagaagtgga cagtcggcct 2760
atatccaggc aaggtgcggg aggcacggtg ccaggcgtca gtgcatggcg cctccgaggc 2820
ccgcctcact gtctcctggc agatcccatg gaaccttaaa tacctgaagg tgaggagagt 2880
gaagtacgag gtgtggctgc aggagcaggg ggagaacacc tacgtgcctt acatcctggc 2940
tctgcagaac cacaccttca ctgagaacat caagcccttc accacctacc tgggtgtgggt 3000
ccgtgcatc ttcaacaaga tcctcctggg accctttgca gatgtgctgg tgtgcaacac 3060
gtagcgagca ggccacagcc tggcctcggg aaggtggctc ctgcagttca gcgtccctgg 3120
gcccattaat cccactgtgg agacttctgg gaactattta ttgagcaggc ctgtgcctcc 3180
acatcatctt gttgtctctg ggggtgtggtg tcacagcact cctctttgcc ctagagataa 3240
gggacctgac ttccccttct cccatcctga acatttgtac ccctggagaa gttccttagc 3300
agggaggagg aagaggagag gaggaagcaa agaatcacia ggaacctctg gctaggtgat 3360
cctgatgttt cctactgagt ttttctggta tccagatttc tggaaaccga gtaatcatgt 3420
actgtttgat tgggtgggtc atctgcttcc atcccagtga aatttacctg tagcccagtg 3480
aagggtgtgt ttggaacatt cattaaatga ttctaagcat c 3521

<210> 350

<211> 4708

<212> DNA

<213> Homo sapiens

<400> 350

gtttgcagac cagaatttga aatggagttg tttgaggaga ccattgtgtg tcttcgtgaa 60
accgattgtg tggaacctat cagggctgtg gaagttttag cgaatgcctt ttcccagagc 120
ccagcattgt ggattccgag aagtggcatg tgtgtctcag tgacttccag tgatgcctgc 180
cactctgaag agatgaagga gtgtcctggc aagacctgga atcccagctg tagcacctgt 240
ggagagatgt gatttagatt tggatttggg gtatctgtga ggaagagtcc cagagttttt 300

catcctgaag ggggcaactc ttgggcagtg gtccaacagt tggccataaa tgtgaagctg 360
gggcgctgtg ctgaccaggg catccagcgt taagacgact gcctaacttt ggccacatgc 420
gttgtttttt gggttccgtt tcgtatcagg gcatgctggc taaaagatgg gagccagcaa 480
cattctcttg ggctccatca tttatatgag gggttggaat gccatctgta ccctctgtga 540
actcccactg ctgttcactc agttaatcta agggacacca aggggtctgc gggaggatga 600
cctcacaagg gactgaggac atgggagacc accctcctgt gggtagaata caccagaggg 660
cccaggcttg actctgtcct gtgttaagga ggcatcggtg gttttgctga gcttgtcagg 720
tgtttataat ggacagttgg ggattggggg cctaggctta ggtctttgag agcctctgtg 780
tccaggagag cccagtaggc atccagccat ttactgcttt aatagggtag catgaggctg 840
agagggatag tttcttgcat ccaaagccct taggcacctt atgtccatcc taagtgggcc 900
agagactcca gggctgcata gagcttgcca gagcttctat aatgaagggg tctctgaggg 960
caccaacagg agtgcccatg gattttaagg tttgattata gaggttgttt atggagggtg 1020
ccccatttaa agcaagctga tttgtaagca gcagcaagaa gattaagtaa aatttgtaaa 1080
tgaggactac attgccatca gaacctcgaa agtatctaaa gatgttgac ttgtatgtcc 1140
ttaatgagtg tgacaatgag tttcctcatt tgtgctcctg gagaaggcgg atgtggtgaa 1200
gaccctgtct gcagacattg tgtgccatgg caaagccgtg gagctccctg tgggtggcct 1260
gcaaagggtg atgtgcccct cagggcgaaa ggcaaacggc agccaagaag ctgtgcaagt 1320
agacacttaa tgggacatgt tagccaaatc tgtaagagca aaatatggc cagttattta 1380
ttgtgtagaa ttaataattt taataataat ggaaattggg taatggatgg gactgcagca 1440
ataaggttgt agtaatccac catgaggcac actttttttt ttccagggtt aaggatagga 1500
aagattgggc tgttcaatgg agaaacaagg gtataatcac ccctttatta attagtaagt 1560
tttaatcctt gaatacctca tattaactgt tttaactgga ggtccatggg gcatcatttt 1620
atcaagctag tttataactg ccaaagactg actttaattt taatttatta tttgttttat 1680
tagagtgtct gtgttcaata tgggatatta gggcggttggg tactatgacc acaggaaatt 1740
tagacaggct acagttaaag tgaagcatac cttacccatc cccccccat tttatattta 1800
gttgcctttt taaaaagatt ataggggtac aatgtttaga tttagtggga tctccaggta 1860
taactgtaat ttgagcccca gtgttaagac tatgaagctt tgtcaatggg tacattttag 1920
caaatgttac aattaattta gaacctaaat tatggagaca caaaagccaa taggcaccct 1980
tttatgtttt ggttaaagt ttccagtatat acatcttatt tatttgtaat attagtatat 2040

aatttgttgt atacattttt agtgtataag cattggattt ctaattggat cagattaggg 2100
accttccgtt tagctgcata tgtacatata catgtacaat ttattatata tttgcgttaa 2160
aatagcctat ctgcatgtgt atatatgtgt gtatgtgtat gtatatgcac tcacacgcat 2220
aaatacacag tctatttagt tacctttaat gttttttccc ttgtacctag gctttttctc 2280
gctttttcct ttttttctga ttttgtggca atttagttgg aaggaggcgg tcccagcatg 2340
ttgacaggca ggggtgtcag agtgcccagg cacttggtg ggggggtggtt acaggctcac 2400
gtagctcagg ggcttctgca ggtctcaggg gagtgggaac aaagtgtccc accccttccc 2460
cttttctca aacctcaagc cactggtctc tatggataga tcctttgcat cccaccggat 2520
tgaggaatga gtcacaacag ctgcaaggct cttaaagcaa catttaaact ttttggcggc 2580
tgtcatttct gtgaggaggg tgctctcac cagccgcatg gccggaggat ccctgcagcg 2640
ctttggagac caacaccag atcctttgcc caggagtgcg attaattcct cactggatgc 2700
tgggggaggg cccctcaggt gagcagccca cactgactt cagcgttgct ggctcggtta 2760
tcagactctc atccaacaca agctcacagg gaaagccgtt ccttgctcct tgtggaggga 2820
gctaccgtca ttgccctgag accaccagcc aagaaagtag gtatgtccag gtagggaatt 2880
cagagggacc cagtgcattc aattatacaa ttataccag aaggctcctgt gtaggggact 2940
gcgattgaca tcaccctagt ctgcagcacc aaggactgaa tgagctcagt cctcttataa 3000
tttaggctgg actgtcacag acactggcag acacagcata cgtggtgcag ccaaagtga 3060
aacatgccag cagcggccat gctccccagg gtgggggtcc agttagtaag ccacgcgcag 3120
ccaagaggcg aggcattgcc tgtgccacac acggactcac cctgctcact gtgcccgtgg 3180
tatcgaaatg taccacgtt taattcataa aggagaggct gctgtcattg aaagaaaagt 3240
ttgttacttg catttctgga gaaaaggagc gcaccaggcc acgcagggcc acaggaggag 3300
gacgcaccag agtggtcagg aggcagaact aggcgagcag ctttccactg tgtctccatg 3360
gcaaaggcga agatgggcgg gggcagagtg taggattggc aggtttgaat gtcttgggca 3420
gtagctacag ggggtggtctc cagctgcctg gtgcctggcc ctgggtgatc aggggtgaggg 3480
gatactgcct tctgcagtgg aagagtcaaa tcgaggagat ggactctgag ttggttagtg 3540
tgcaaagggt cactcccaag ggacccttt gctatctcta agaattggcc tgccctggga 3600
agggcagtct ctccccagtc agtgagggtcc ccaagatgtg aaaacattat acattataaa 3660
aaagcatgat taatataagc tcattctagc atttcaggtt acagcttcta gaagaggttt 3720
gtagtctcaa atgagtaggt ttttctcta gagaggggcg ggcctggacc ttcaagcacc 3780

ccttggtgtg tttaggagct caggagcaga agcacctgcc tgcagccctg cagctaagga 3840
 agttctctca gtcactcaga gcagggaggg gctgagagag tcatgtgagg ctccccgggt 3900
 actacgacag ccctcgaggt gaaggattgg ccctgatcat aatagagaac cctgaggaag 3960
 ttctactgtca tgagtctcgg ctggttggcg catgtgacct ttgaaggatg aagatggagt 4020
 ttgcaacatg agtatctcta accttttgct tttcagggat cattttcaaa aattgcattg 4080
 gggccttcgt tatttaccat agtattttca ctttcatagt tttgtcacct tttgtactg 4140
 tgaacagttc aaccagtgac cgacttctct ctcattgctgt ttaccccaca cacaatttcc 4200
 cactcaattc tgaaaataag aacctgttaa taggttggaa agctgtgtac tctattcata 4260
 tattgttctt tcatgctagt ggagagtggg gtcattagca tcttaatttt agagttgtga 4320
 aatgatttta ccaattagga attgaatgtg tatttttttt ctgtttaata agaagagcaa 4380
 atttgaataa ataagctggg gtagataaac ttaataatca tgctttttct tgtttggaga 4440
 taggtgatgt gttgtcatat cctgtgatac aggtcactca tctggccttc tgtttctgaa 4500
 gtttaagtct ggtttgaata tgtaataata ctactcagca tttcttggtg cctaagtgag 4560
 acgaaactta aatgttatga tatttacttc atgtattctt gtactgttca tttcaattaa 4620
 ttgggtattgt atatctaata tgtgatattt gaactgaata aaacttacag tgttgtaaata 4680
 gttctttaat aaataatcac acctaaagt 4708

<210> 351

<211> 3541

<212> DNA

<213> Homo sapiens

<400> 351

atcatgtgga cttgtggctt attttatttg agaagttgta atttgttcgt ttggccagtg 60
 gcgacccctt caagctggct tctgtgtcct ttggatatgtc cccatcattc ttggagcatg 120
 ttcttacttt ctaatacaaa aagacattcc atgctcatct ttgtatttcc tctgcactaa 180
 ctctgcaagg tgctttttct ctaagatctg gtctctttta gcagaaaatg gtatttagaa 240
 accaagatct gggcagtagg tatgctcatt gtttgggtgcc attgctgttc ccaagccctc 300

tcattggaaca gagctaggga acaaacatga atgcatgtgc atgcacacac acacacaccc 360
cactcataca cacacaccta tacatctctg tatctacaca taccgaaagc tgtaggagtt 420
tataccagta cttccaattc caaccttatt ctagttttca cccitttcaa atttgtaatt 480
ctctgactat aagaaatctg gctcctgctc tttccctgct gccactgaat tgtatagagg 540
cggagtctcg ggtgcattca agatccggct tcaactcgtaa cccactgcca tggccgagga 600
aggcagtgct gctggagggtg taatggacat taatactgtt ttacaggagg tgctgaagac 660
cgccctcatc catgatggcc tagcatatga aatttgcaaa gctgccaaag cctcagacaa 720
gtgccaagcc catctttgtg tgctgtgtgt gcttgcatcc aactgtgatg agcctatgta 780
tgtcaagttg gtggaggccc tttgtgctga acaccaaacc aacctaatta aggttgatga 840
ccagaaacta ggggaatcgg taggcctctg taaaactgac agagagggga aaccgtgtaa 900
agtggtttgt tgaagttgta tagtagttac gaactatggc aaggagtctc aggccaagga 960
tgtcattgaa gagtacttca aatgcaagaa atgaacaagt aaatctttgg cacacacaca 1020
cacacacaca cacacacaaa agaaagaaaa aataacctca aaaataacca atctattgct 1080
gcctcaattc acagtccctt ccttgctgcc ctcagacatt ctctcaggc tccacactgc 1140
agcccaggaa agaagccctt caccaaacga ggccaaatat ttctttgtgg gcagtgttcc 1200
ttctgacatc actgaggagg aaatgaggaa actgtgagaa atatgggaag gcaatttcac 1260
agaaagagag ttttaataaa ttaacaaaaa ggaaaaatga aaaaattaaa aacgacaaca 1320
aaaaagaaat atgggaaggc aggtgaggtc ttcataagga tgaaggcttt ggctttatgc 1380
acttggaagc acgaacccta gtggagattg ccaaagtggg tctggacagt atgcagctgt 1440
gcgcaccctg cctgccatag tgcattccctt acagtctgaa accttctaac aaacttttgg 1500
aagaagactt ttctttggcc aggtggagag ggctgtagtc attgtggatg atcaaggaag 1560
gcccttaggg aaaggcattg ttgagttctc aggacagcca gttgctcaga aagctcagga 1620
cagatgcagt gagggttctt tctgtttaac cacgtttcct catcctgtta ctgtgtagcc 1680
cataggctaa ttaggtgaca aagaaggact tccagagaag ctggttgtaa agaaccagca 1740
atttcacaag gagtgagaac agccacccca gtgtgcacag catggctttt gaatataagt 1800
atgcatatgca ctagagggtg ctcatatgaga tggagaagca gcagcaggac gaagtggact 1860
gcaatatcaa ggaggctcat gagaagctgg agatggagat ggaggttgct cgccttcac 1920
aatgccaggt catgctaag aggcaggatt tgatgaggtg tcaagaagag ctgtggagga 1980
tggaaaagct gaacaaccaa gagatgcaaa aacgacggca actggagccc atgcgagagg 2040

agtgcaggca ctaggaggaa gcaatgcact ggtaatggca ggaaagattc actggaacct 2100
tctctgatat gagacagcag gagatacaga tgggccagat ggctgtggga ggtgctatag 2160
gcataacgga ggcaccatgc cccctgcttc tgtgccagct ggcagcccag ctctccaga 2220
acctgaacct atgatgctag attgacccca ccaacaacgg aatgctttgg ccaagctgct 2280
gcaacggaag gaattggggc aattggcgga actcctcctg cattgaattg tgcaactcct 2340
ggagctgaat ttactccaaa cacacgttgc tgatactaataaagctgcag tgtctagttt 2400
ctcaaacct ttaaaagggc cttttttgga ctagccagaa ttctacccta gaaaaatgtt 2460
aagagattcc tccaatagt taggtctacc ctacctatac tactgtaggg agtatatttg 2520
aggaagaggg caagggagga gtggtattta acaaaccagt tctgtgtggt atattgttta 2580
actgatgagt tctctgtggt gcattactga ggtctcaaat gtgactgttg aagacctggg 2640
ggaactacag tgaaatgaat ccagttagag acccataat cttgatcggt cttttttct 2700
ccatcctgtt tcatttgctt tcttatecat aactcccca accccacaga cactgccaca 2760
tacaccacaa aacacaacct cctccaatga ccttcgcccc actgtccat tcaactccag 2820
gtgagaattc aggcaaagt ccacagaggt cacaaacaat gtacgtatag ttcttttata 2880
tccgatatat tatcccttct tgtcctaagg aagacattct ctcttagaga ctttcatttc 2940
agtgtatctt ttttaaaaat cttgtgttaa cttgcctcaa tctttttctt ggataaggac 3000
aaccaggaat ggccgttttg tgtctatgat gttgctgttc acaacttttc ttgataggcc 3060
tagtacaatc ttggaaacag agttgctgta tgctgaaggt ctgagagtag ctcttagcct 3120
tgcctatctt agatagtagt tatgctgtgc atatttaatt gatgtactat gtttgatttg 3180
ttgctgatac tttaaatttg aagtttttct gagaaatgga gcagcaatgc agcatcaact 3240
tgttaaatta catgttaagc cttgaaaaaa aaaggagatc acatcagtaa tcccagcaca 3300
ttgggaggcc gaggcaggca gatcacgagg tcaagagatc aaaaccatcc tgtccaacat 3360
gttgaaaccc cgtctctact aaaaatacaa aaattagctg ggcattgttg cacgtgcctg 3420
tagtcccagc tacttgggag gctgaggcaa gagaatcact tgaaccgga agacagaggt 3480
tgcagtgagc agagatcgcg cactgcact ccagcctggt gagagagcga gactcagtct 3540
c 3541

<211> 3886

<212> DNA

<213> Homo sapiens

<400> 352

gctagtggag cggaagatgg cggcggcggc ggcggccgct gcagccggga cttcagttgg 60
gctgaggcgg cgatgttctc ggtcctctcg tacgggcggc tgggtggcccg cgccgtgctc 120
ggcggcctct cgcagaccga ccccagggcc ggcggcggcg gcggcggcga ctacggactg 180
gtgacggccg gctgcggctt cgggaaggac ttccgtaagg gcctcctcaa gaagggcgcg 240
tgctacgggg acgacgcgtg cttcgtggcc cggcaccgtt ccgcggaagt gctcgggggt 300
gcagatgggt taggaggctg gagagactat ggagttgatc catctcaatt ctcagggact 360
ttaatgcgga cgtgtgaacg tttagtaaaa gaaggacggt tcgtacctag taatcccatt 420
ggaattctca ccacaagcta ctgtgagttg ctgaaaata aagtcccttt gctcggtagc 480
agcaccgcct gcattgtggg gctggacaga accagccacc gcttacacac agcaaactg 540
ggcgattcag gcttcctggg tgtcaggggt ggtgaagtcg tgcaccgatc agatgagcag 600
cagcattact tcaacactcc attccagctc tcaatcgctc cccctgaagc cgaggggagtc 660
gtcttgagcg acagtccgga tgctgctgat agcacgtctt tcgatgtcca gctaggagac 720
attatcctga cggcaacaga tggactcttt gacaacatgc ctgattatat gattcttcag 780
gagctaaaaa agttaagaa ttcaaattat gagagtatac aacagactgc cagaagcatt 840
gctgagcaag ctcattgagc ggcctatgac ccaaattata tgtcaccttt tgcacagttt 900
gcatgtgaca atggattgaa tgtgagaggt ggaaagccag atgacatcac cgtccttctt 960
tcaatagtgg ctgagtatac agactagctg aggtgtcaag tcctgccttt cttttcatca 1020
tcccaaattt cccctgccgt gtgtgctgat cctgctggca ggaccacatt tctttgccac 1080
tgatctcaat ggccagtgat gtaagtcttt tgcctgtctt cttgagactc gttgagatct 1140
ttgttgagaa ccactactat cattcactag ctcatatctg ccggcagcaa ttgaagagat 1200
ccaatatattg aagattggcc ttcatctctc gatgttcttt ccatgatggg gatggaggtg 1260
ttcagtgcc aagtggtgtg tacttttcaa agtagttgaa gtattgaaaa tgagtaattg 1320
tggtaaagtg aattcaaat cctagtatgc taaagggatg gtacaagtct aacacaaatt 1380
gtacgtaattg atacatctac tagaaacata cattattcat caaaagaaat gttacatgtg 1440

tactccacag gcatagtctt tgttatgatg attgggtgtgg ctttatgtct ttgttataaa 1500
ctcctatfff tcaggggctt atgattctgc tctaaaacat tgctctgggt tatacagttt 1560
tgatcccaaa agcttttttg ttacaaatcg ggagaaaaat ccattttagt tctatggatg 1620
gaaatatttc atgcttttaa aaagatgttt gtgttcctgt ggttaaagtt ttggcagttt 1680
attgattagt ccaaatacaca ggctaaggcc tgatctccag gaggggtagg ggagacactt 1740
taccagtatt tttttatgga aataatactc aagggtgtaa aaccctcaa agcctagaaa 1800
tttaattgtt atggctgaaa ttcctcctag ttgtctgata gaatgccctt gaatgggaac 1860
tctaggtccc aaggcctgaa ggggttgagaa cagacagctg taactttgaa tttgtttggc 1920
tttcagtggg catgctacct acccatactc gtactctcag accttttatt agtagccttg 1980
ctttctatag agcatgcacc aaatccagtg agtccatgtg gagagagcac tgtgtgcgca 2040
gcggcagcag cacagacgtc catgaggaaa actcccagtg atgatctgac atttacaact 2100
acccacatg gaaatttagg ggtttctgaa tcaagcttaa tgtttacagt ttccaaatag 2160
ccattttgca gtgtatagtt tccttacaaa actaccccgcc attcagtttt cacattatct 2220
gcaagctgaa acttattttt aagttttgtg tacaagtga ctgctgtaaa gatatatatt 2280
tttgggtcag tttttttcct tcattaactt ggtggtagaa aaaaatatat acttagaaat 2340
ccttaaatta aagccatgtt ttatatataa gtcaggtaac attgggtgtat agatgagaat 2400
gcaattaaac ctgatgagaa tctacttgag aatatagaaa gtctttctct aaaggagata 2460
ctgactccct ggtttattgc attaaaattt atgtttgagg ttacctcaac ttgtttttaa 2520
agattttgtt ttgtgaattt gtactgtata tttagagtaac tgtcaggctt ttattttaaa 2580
ttgtttaaca tgtaccatgt acatgtcatt actatatttc aatgcatcat gcttgtaaca 2640
ggcatttcat ttataataag aatgagttat tcatttgtaa gccgttcagt aatttatcta 2700
ctactcctaa attggcataa tgtagataa tctattttga atcaccttta attacatgtc 2760
agaatgcctt aactacccta acttgacaaa acagaattct ttggtagacg cggtgggggc 2820
ggggtggggg gtctggacgg agtctctatt taaggagaaa tcatcatgct atgataaaac 2880
acagaagcat gagggtgcaag tggcggggta tttattttgc acaaactatt tgcagtctct 2940
gtgtatttaa aaagtaaaga aagttgcac cagaagggtt ttgttagaat gaatacattt 3000
atattaggac tgacaacttc agctcttttg tttaggtttt caattatttt tggttaagagt 3060
atgtagcctt atgatctgga tatattttgc attcattttc caacgcctac atttaattcc 3120
tggttaagagc agtgctcgtc aagtttctgg tttttctctg ctctcattta acccgtaaaa 3180

cacaatcttt gtaaagctag attggtggtg ttttatacaa cttatttact cagcttacct 3240
ttttgagaaa cgattgtag aaattgacga tgtgtttggt ccagtgtatc tgaaagtagt 3300
gggggcaaga attgagtttc acagtgggaat tggctttgga tctggcctat agattagtga 3360
cataaaatat tttctctatt ttcccctgtt ctttttgtgt tatgcactta attttatgac 3420
tgccgggggg gtcagctgga gtgctgctta acaagtatct ctctactct cagtggtcag 3480
aggctgtggt ggacccatag tagaattttc caggtcacag acccaagctt ccatgggttg 3540
ttactgtgct gtaccacttg gtgggtctga ttctgaacct gatgtgtgtg ttaattatat 3600
tttaagcaac acacacacac acacacgcct catgtaatgg acttttataa caaaagaaaa 3660
aatattggatt tctaatttac aaatggcaaa ttatttatcc ctctctggat gcaccaaaga 3720
ccagtaaagt ttatagcttt tccatctata ttataaagc aatactgtat tataaaaatc 3780
aatattttta tcacatgctt gaaattttta tttgtttgtt ttaaaatgtg cactctaaac 3840
atatcagaac cttatttctt cctatgaact taagctgcct gcgcac 3886

<210> 353

<211> 3636

<212> DNA

<213> Homo sapiens

<400> 353

gtaactgcca cagctccatg caacatgagg cttgacatag ctgggaagaa aaggcctttt 60
tttttgtctc tgagatgaag tctctcttgt cgcccaggct ggagtgcagt ggcgtgatct 120
cggctcactg caacctctgt ctctgagtt caagcgattc tcttgctca gcctcccatg 180
tagctgggat tacaggcgcc caccatcaaa cctggctgat ttctagtaga gacagggttt 240
caccatgttg gccagggttg tctctaactc ctgacctcag gcgatccgcc tgcctcggcc 300
tctcaaagtg ctgggattac aggcatgagc caccacgtac agccggaaaa ggccttttag 360
atcaaaatat ccaataatgt ccaaactgtt ctgcctagag agtataggtg aattaaatgg 420
ggaagataga aactaatgct ttgtgaactg gggcttccac tagaacagag aggtcctgtg 480
taacctgcat agagcaaggc tcagagaggt gtccaacaga atgggttcac aatttttttag 540

tctctcttag gtaggttttt caaattagac cttcattttt agagttgata tgttacgcta 600
ttatactgag tatatcaggc acattaaatc caaatggaag aatagcattc cagagcttaa 660
taccaatggt cagggattag ctagcatttt ggattatacc cactagtgtt ttccatttta 720
agatgatctg acatttggtt gggatagaca cccaagagac acccaagttt tgtgtctctt 780
ttactggcac atttcaaggt tatectctca ctttatttct agaaatagtc atttaatttg 840
catatttggt acttatcttt gttttaaaag cattccttct gaagtttcaa gaagcactta 900
ctagaatcat gctttgagaa aaactgacta ggatagaatc tttccaccta aaattagggga 960
ctggcttcaa tgcccagaat ttttagattg atatgccaat aattccagta acaagtttta 1020
ttatggtttt taaatcctgt cctaaagagc agaaaagtcc aaaaggtaaa tagccaaact 1080
ctttcccact taatttttat gatattgtgt ctgtgtttta agaggaaaca aatccactta 1140
cttctcattc acattaaaat gaaaatgttc ataaaaactg tttaatgctc aagaagcctt 1200
catgagcctt ttagagcctt ttgacatggt tccatttgct gtttaaaatg cagaactgag 1260
ttttgggaag aattaactct tgagaggcga aatggttcga gtagggctgt cagaaagcca 1320
tactctatga gaggaaaaga ctttccacaa ttccagtatt acgaaggacc ctggtcagtg 1380
agggaattgt ggcctgggat tttgtggttt cttaaaggct tgtacacaat ttctcagcgt 1440
ggcctggta gattgaaatg tagtagtacc acgaaagcag agcagatttc caacaacatt 1500
ttccagcatg ctcttgaaat tttaacaaac ttggcctttt cacttcttga gggattttca 1560
gctaactctgt ttttcagtac catattaata agcatcatac agaattatta aacttgagggt 1620
atgtgtttgg tttaaggctc caactgggat attagccacc tcagagtcca aatccatgcc 1680
agtgttgggt tctgtatcca gtgtaacaaa aacagccttg aacaagaaaa ctctggaggc 1740
agaattcaac agcccgtccc cccaacacc tgagccaggt gaagggcccc gtaaattgga 1800
aggatgcaca agttccaagg ttacgtttca gtaagtaacg atgctcttta ctaagtgggtg 1860
tatagaagaa tctgtaatga ctaacttgtg tgtttctttg atttgtttcc tttagagaga 1920
ttttgattgg ctgcccgtta aattctcttc ttcttttcat ttgatgggcc agctttttca 1980
ttctaggctc ctagctaaga gatctcattc agatccaaag caagtacat gtacaaagag 2040
aattacttcc cctaaactgg ttggtaatc aggttcttct acacaaataa ttgatctgga 2100
tgatacagac tctgcatcag gagacaatca gtctttcaag attaaatata tcgatcatcc 2160
ctcttaatgg ttcattgagca gcccaagaag atactagatc tttcagagac tacttagaag 2220
ggcacgtttt tacaaccttc ttttctagtc ttcagttaaa gatgtgccta atattgctct 2280

atcctgaaaa tgaaaacata ctatgtaaag agttatctgt atagacttgc ttcagagtgg 2340
cactttgatt gtcaaagagt taatcctgct attgaatgtg tttcagacag atctagtggg 2400
ggatcaattt gttttataac aatggcagct cttttttgaa attagtctac agttttgctt 2460
tagttctctt gccaggatgt cagctagttt gtcacttaaa gaaaaggaag aggtgagaca 2520
aatcagatca gccgaatatt gtaatcatgg ttaattaaac ctctgatttc ctgtcctatc 2580
aagagagaaa gaaccctttt tttgtaactc tagctgtctt agcttaaaag gtgaaacctg 2640
gacaaatgaa gttggaattc aatttggatc tatttttgcc aactgggtatt ttcttctctt 2700
cttgcattct ctcatctgta ctattaactt ttttttctct tctggaatga atggccttct 2760
ttgtgattt acagttttat ctaatttcac tgtgtttaaa agcacatttt ctctgtagt 2820
catgtgttcc ctttcttttg actagagtca tttgaacagt tctaacagaa agatgatcta 2880
tattcattct ccatctttcc tattaaattt gttaaacc taaattgaca tcaacaatct 2940
ggctacattt gaaccaatat ccagacacaa aagcaatttg gctgagacaa gttagtttct 3000
gataaatgct tcagtgtgtg tgtatagatt tttctccttt accattttac acagataatc 3060
tgaatcagaa aatactgcaa ctcttctctc cttttgtctg cttttgttcc tccaaaagta 3120
agtggaaatt acatttccaa gaaaggaaat gaaataattg caggcccaag gtctgcaaaa 3180
tatgtgttga attgacagtg aaaaggatcc atgtgttgac agacacagtt gttagatgcc 3240
ataaaggcag atgtgaagct caatttatct ctcatcttgc ttgttcaatg actgcttaag 3300
agacacattc cagtttaatt tatctactta aagctctaata acaataactg tggactgctg 3360
tattaacttc taaactttga aacctaattgc tcgattattc ggttcttgac attcttttagc 3420
taaataaaat aactgattcc gtgtattttc atattgacag taatttacca aataagagca 3480
cctttctgga aaaatctgtt tcttaagtat aattagacta tccagattga atctgagaat 3540
tctgtgtatg tataggtaat tatttaccca gactggcaca cttcattcat ttaatgttta 3600
aaccttttaa tgactaaaag aattttaact taatgt 3636

<210> 354

<211> 3782

<212> DNA

<213> Homo sapiens

<400> 354

tgccatcatc atgaacacta tcgacatgta caacgtcacc cgccccatcg agaagctgca	60
gaacccaatt gtgaccaggt tcttccccctc tgtgatgctc tggggcttca cagtgatact	120
gcctctgatt gtctacttct ccgccttcct cgaggcccac tggaccagat caagtcagaa	180
tctggatcatg gtgcacaagt gctacatctt tctgggtgttc atggtagtca ttctgccctc	240
tatgggactg accagtttgg atgtctttct ccgctggctc tttgacatct actatctaga	300
gcaagcatcc atcaggttcc agtgtgtgtt cctgccagac aacggcgcct tctttgtcaa	360
ctacgtgatc acggcagctt tacttggcac aggcattggag ctgctgcgtc tggggtcact	420
cttctgctac agcaccgcc tcttcttctc tagatcagag ccagagagag tcaacatcag	480
aaagaaccag gccatagact tccagtttgg gcgtgagtat gcgtggatga tgaacgtgtt	540
cagcgtggtg atggcgtaca gcatcacttg ccccatcatt gtgccttttg ggttgctcta	600
cctgtgcatg aagcacttgg cggatcgcta taacatgtac tactcctttg caccaccaa	660
actgaacgag cagatccaca tggctgccgt ctcccaggcc atctttgcgc cactcttggg	720
tctgttctgg atgtgttct tctccatcct gcggttgggt tctctccacg ccatcaccat	780
cttttccctg tccaccctcc tcattgccat ggtgattgcc tttgttggca ttttcttggg	840
gaagcttcgg atggttgccg actacgagcc cgaggaggag gagatccaga cagtgtttga	900
catggagcca agcagcacct cctccacgcc cacctccctc ctgtatgttg ccaccgtgct	960
gcaagaaccg gagttgaatc tgacccccgc ctctcccca gccaggcaca cctatggcac	1020
catgaacaac cagccggaag agggagaaga agagagtgggt ctgaggggct ttgcgaggga	1080
gctagactcg gccagttcc aggaagggtt ggaactggag ggccagaacc agtaccactg	1140
accgggacct gaggcctcca ctggcgactt gttgaggggt caggggaggg cctggcaagg	1200
ggaggcagga ggggtggcctg gacctccca ctacctctg cagactttga gaagcctaca	1260
gtggagacat ccaccacccc agccatgggc catacggggg tcctgacctg ctgcccggct	1320
ggaactgggg ctgctcggca gtgctgaagg agcctgggaa gggatgggag gatacaggca	1380
agcacatgtc ttgagagagg tggctggagc cccggcacag agactgaacg ctgggggtccc	1440
ttcctgggac caagatggag aaggtgttcc taaggaggga gacagaagga ggctgccgaa	1500
ggctctgtgg ggtcatcacc actctgcac agctgccctt aaaaggagct tctgtctgtg	1560
ctcctcctcc cagccccggc ccattcctcc cctgcagtct gaggaggcaa aggtatgtgc	1620

acgggggcaca ttgacaggac acggaggacc acctcatcac agggttccct gcatggggat 1680
ctgtaaagag aaagtttctg caccaccag agcaagagcc aactgaaagc gtagacctga 1740
gaagaggtaa ctcagcccct tctgtctct ctgccctcat cagatgtccc caggagcagc 1800
agggcagagg cccttctttc tattcttaca agggtagcta gagcgtgatc actcagggt 1860
catcaaatga gactcgtgtg cgtttttcag aaggaaacct tggtagtcc ttgctgggta 1920
acacaaagtg gggtagagac acagaagccg aattcatgga aggggggtct tctcccaaa 1980
actctgtgtg gtgggaaacc agctatacct cccaagccc cagggcctaa agagaagacc 2040
cccgaagcca aagatgtggc cacttaaaag cgtctcctgc ctcctacca actgagtgcc 2100
tgggccccca gcttggccaa gatgggcagt acgttagggg aagaaccca tgcttcaaac 2160
ttaaggactg accatcacct gcgtcccaag taggacctt cctcccttct cggggctgcc 2220
cctgcaccct gccttgaaga ccaccaagc ggccctccagt gtgggcctgg tccagacatt 2280
gcagatgctt caaccgtgat gtcgccccag gcctgccagg ggtgtggtgg aggggaaggc 2340
cacgtgctcc agggagaagc ctttcttga gaagcaaggc tgcctcca gggctgccac 2400
taccagagac ctgggggagc tgaattccga acagtgatgg tgacactcag cacctttgcc 2460
acagccgggg ggaaccggct tctgcctctg ggatgggctc tcatcaggac caccgtgcag 2520
cccagccagg gaggacatga gaagggccag tgggggcctc aatgaaccag aacaagccaa 2580
gctgaatggg gtctgtgtgc tccagggcc tcttcagccc cctccccaa aggtctgggt 2640
ccctgccacc aacctactga aggccggccc ccggctcacc tcacctgagc acctgcacca 2700
ggccccaggc acatggctgc cctgaactca gatcacctag acctgtccc tgccccacct 2760
ttgccccatc ctagccccag aagctccaag cttcacgcga ggtgagaaat tgtgtcaat 2820
gggcagaaac tgctataccc ccagggcagt gccacattt tggcatgagg gtgtctttcc 2880
agagagcttg ggttggctgg agagaggctg tctttcccat tccttgtcca gctaggaata 2940
aaggggaaat ggtcctagcc tggcccctac acaccagggt cccacaggcc ccctccccac 3000
tggaatttca ccaaccaaca aggggaaagt acgctgttac agcatagcgg tcaggcccag 3060
caggagcttg gcacatgatg gggagggtggc cagctccagg ccctgcccga ccccatcatg 3120
tgtatttggg gtatggggtg tgggggtcac accagaagct ggcctggggg ctcttctttg 3180
ctggacacag ctccttgccc cctgccccca gccctgcag cccctgccgg actgtggaag 3240
ccacatatgg gaaaagtcct ggcagacaat gtggcgggat gactgggggc ttctccctct 3300
gaacctgggt ccagtgtagc ctggctctga gagaaggtgg tgagcatgtg gagaaggttc 3360

catagtccac tcttagggga accagcaaag cctcatggca gttggctcca tctggacctc 3420
ccccaccta ctgcatccc actcctctgc cagccacttc ccagccgccc caccacctc 3480
catccaccaa atcacctcct gacttaatcc tttctggaag gagctgccgc ccaggaaccg 3540
gtattgccta gaggctccag gaggggccct cctcaggcct ccagtggccc catgcccacc 3600
tgctgaccc tccactgccc ctggaagcaa agtgcctatc agcagcgttg cgtcctcttg 3660
ggcccccggt cgggggggag ggggtgtggg ctaaccttgg ccaccaccac aaaaggaatg 3720
tgccagaatg ctgaaccttc ttgttaatgc tatgaccgtg ccttgaataa acaagtcctc 3780
cc 3782

<210> 355

<211> 3953

<212> DNA

<213> Homo sapiens

<400> 355

atacagggtt tggttctggg cagaaaatcc atgatcctga gactgcagga ggcttttcac 60
aaagttcttt gtcactctta ggagaagact gagtcaggga aaaggtgaac cctgcagact 120
gtactagaag acaacgcggg agcacagagg agaccaggac ccaattccca ggctgtgtga 180
ccttggacac gttacagctc ctctctgcat ttcagggttt tgtttttttt tttttttttg 240
atTTTTggtt tgtttgtttg ttttttgtct cgctctttca cccaggatga agtgcagtgg 300
catgatctcg actcactgca acctctacct cctgggttca agtgattctc ctgcttcagc 360
ctccccagta gctgggacta caggcacgca ccaggatgcc aggccaattt ttgtatTTTT 420
agtagagacg gggtttcacc atggtggcca ggctggtctt gaactcctga cctcagggtga 480
tccacccctc tcagcctccc aaagtgttag gattacaggt gtagccaccg tgcctggctg 540
catttcagtt ttttttcag taaaactggt caaccatcca cctcactgca ctaccgtgga 600
atgacttaaa ttttgcgaga gcatTTgggc ccacagtcac cgcttgctga agcagatggg 660
atgcctggtc caaggtcacg attattaaag cagacacacg gggcactttg acccacctgt 720
agtacatTtc tttcacagca aggcagtgca accggtagca catcgggctc ttttagatgc 780

tgctccagcc ttggtccggt ggatcatgct tggtttagaa gctgggttgt ctttctcctg 840
ccccagtc tgtctttgct tttatagtgc atcatacacc acgtagaacc gagccaggtt 900
cctgccatgt ggacgctgtt cctgcctgag agtctcttag aggaaggctg ggaacactgt 960
ggaaagactg ggcattctctg caggcggagc tgaatggatg tgaaaccctt gtgggcatgt 1020
gcttccgagt tcctcagcag gcatttgtgt tttttggtag aaagtttgct ttttgttttt 1080
tttttttttt aagacaaggt ctatttctgt caccaggct agagtacagt ggtgtgatca 1140
tagctcactg ccgtccttga actctcagac tcacgtgagc ctctacctc agcctcctga 1200
gtagctgaga ctacaggcgc ttgccgccac ccctggctaa tatttttatt ttttcgagag 1260
acaggggtct cactacattg cccaggctgg tctcaaactc ctggcctcga gcaatcctct 1320
cacagcctcc caaagtgtgt gtattacagg cgtgagccac cacacctaac aaaagtttgc 1380
tttttatcta aaatgacca ggcattgtca ctgtactgct atttttttaa aaaaattttg 1440
ttgttttgtt gttgttgcg tcgttatata gatgagggtt tcctgtgttg cccaggctgg 1500
tttctgacgc ctggcctcgc ctctttatac accaggacag caggactgag ccaccacact 1560
acccaactgc ttttatctca gtgaatgaaa atgatacttg cctggagggt tcccctcatc 1620
taccatcatg tttctctatt tattcctcag ttaagtgggc agaccaacat ccacctcagc 1680
aaaaacttct tcctgacgaa tcgcgccagg gagcgctcag acaccttcat caacctccgg 1740
gaggtgctca accgcttcaa gctgccgcca ggagagtaca ttctcgtgcc ttccaccttc 1800
gaaccaaca aggatgggga tttctgcac cgggtctttt ctgaaaagaa agctgactac 1860
caagctgtcg atgatgaaat cgaggccaat cttgaagagt tcgacatcag cgaggatgac 1920
attgatgatg gattcaggag actgtttgcc cagttggcag gagaggatgc ggagatctct 1980
gcctttgagc tgcagacat cctgagaagg gttctagcaa agcgccaaga tatcaagtca 2040
gatggcttca gcatcgagac atgcaaaatt atggttgaca tgctagattc ggacgggagt 2100
ggcaagctgg ggctgaagga gttctacatt ctctggacga agattcaaaa ataccaagta 2160
agatcccaga gatgcgggtg gatctgtgtt gggaaacatt ctgttcata gctttaagat 2220
gcagcaactc ctgcacagag tggagaaaca tttccaaggg gattgggatt ttaccataa 2280
tgaagctcag agtgagtaaa gatggggctg aggaaatgca aacaaaaaac caaccaggac 2340
ttcgcagggtg aaatggccta ttcccttctt cctgattatt gggatcatct aaaggccacc 2400
atcaagggtt tcctgaaaag ggtttttgac agctaaagta caaaaattat ataagacaag 2460
aacatggacc tatgggcgtt ggctggctga tttgatgggc atatttaca accagctcac 2520

agacagaagc aaaatactat tagttattta aggcagaaac ataagtgatt cttccacggc 2580
caaaactagag gcacagagct ggaaaaactt catccccact cagcacatac tagggaggtta 2640
acttgccagc tttgctttgg gtcatagttc ttacagctaa cttatgtgtt ccagaaaatt 2700
taccgagaaa tcgacgttga caggtctggt accatgaatt cctatgaaat gcggaaggca 2760
ttagaagaag caggtttcaa gatgccctgt caactccacc aagtcacgtg tgctcggttt 2820
gcagatgacc agtcacatcat cgattttgat aattttgttc ggtgtttggt tcggctggaa 2880
acgctattca agatatttaa gcagctggat cccgagaata ctggaacaat agagctcgac 2940
cttatctctt ggctctgttt ctcagtactt tgaagttata actaatctgc ctgaagactt 3000
ctcatgatgg aaaatcagcc aaggactaag cttccataga aatacacttt gtatctggac 3060
ctcaaaatta tgggaacatt tacttaaacg gatgatcata gctgaaaata atgatactgt 3120
caatttgaga tagcagaagt ttcacacatc aaagtaaaag atttgcatat cattatacta 3180
aatgcaaatg agtcgcttaa cccttgacaa ggtcaaagaa agctttaaat ctgtaaatag 3240
tatacacttt ttacttttac acactttcct gttcatagca atattaaatc agggaaaaaa 3300
aatgcaggga ggtatttaac agctgagcaa aaacattgag tcgctctcaa aggacacgag 3360
gcccttggca gggaatattt aaagcaactt caagtttaaa atgcagctgt tgattctacc 3420
aaacaacagt ccaagattac catttcccat gagccaactg ggaaacatgg tatatcatga 3480
agtaatcttg tcaaggcatt tggagagtcc aggagagaag actcacctct gtcgcttggg 3540
ttaaacaaga gacaggtttt gtagaatatt gattggtaat agtaaatacgt tctccttaca 3600
atcaagttct tgaccctatt cggccttata catctggtct tacaagacc aaagggatcc 3660
tgcgcttgat caactgaacc agtatgcaa aaccaggcat ccaatttgta aaccaattat 3720
gataaaggac aaaataagct gtttgccacc tcaaaacttt atgaacttca ccaccactag 3780
tgtctgtcca tggagttaga ggggacatca cttagaagtt cttatagaaa ggacacaagt 3840
ttgtttcctg gctttacctt gggaaaatgc tagcaacatt atagaaattt tgccttgttg 3900
ccttatcttc ttccaaatgt actgttaaat aaaaataaag ggttacccca tgc 3953

<210> 356

<211> 4537

<212> DNA

<213> Homo sapiens

<400> 356

catcaccgtg	gtcgccaagg	atggcggtgg	gaggcttcat	ggggctgatg	tggtgttctc	60
agccaccacc	acggtcacgg	tcaatgtgga	ggatgttcag	gacatggccc	ctgtcttcgt	120
gggcacaccc	tactatggct	atgtgtacga	ggacaccctt	ccgggctcgg	aggtactgaa	180
ggtggtcgcc	atggatggag	accggggcaa	acccaatcga	attctctaca	gccttgtaaa	240
tgggaacgat	ggagcctttg	aaattaatga	gacatctgga	gccatctcca	tactcagag	300
cccggcccag	ctccagagag	aggtgtatga	gctgcatgta	caggtgactg	aaatgagccc	360
tgcgggggagc	ccagctgccc	aggccaccgt	cccagtcacc	atcaggattg	tggacctcaa	420
caaccacccg	ccaacattct	atggagagag	cggaccccaa	aacaggtttg	agctgtccat	480
gaatgagcac	ccaccccagg	gagagatcct	gcggggcctc	aagatcaccg	tcaatgactc	540
cgaccaggga	gccaatgcca	aattcaactt	gcagctgggtg	ggaccagggg	gcattctccg	600
agtggttcca	cagacagtcc	tgaatgaagc	ccaagtcaca	atcattgtgg	agaactcagc	660
tgccattgac	tttgaaaagt	caaagtatt	aaccttcaag	gctgtggatc	cagatacagg	720
accttggggc	gaagtgaaat	attccaccta	tgggactggg	gcagacctct	tcctgatcca	780
cccatccact	gggcttatct	acaccagcc	ctgggctagc	ctggacgctg	aggccactgc	840
caggtacaac	ttctatgtga	aggcagagga	catggaaggc	aagtacagcg	tagctgaggt	900
gtttatcaca	ctgctggatg	tcaatgacca	ccccctcag	tttggaaga	gcgttcagaa	960
gaagacgatg	gtgctaggga	ccccagtga	aattgaggcc	atagacgagg	atgcagagga	1020
acccaacaac	ctggtggact	attccatcac	ccatgcagag	cccgccaacg	tgttcgacat	1080
caattcccac	acgggggaga	tctggctcaa	gaattccatc	cgctccctgg	atgccctgca	1140
caacatcaca	cctggaaggg	actgcctatg	gtccctagag	gtgcaggcca	aggaccgggg	1200
ctccccatcc	ttcagcacca	cagccttact	caagattgac	atcacagatg	ctgagaccct	1260
ctcccggagc	cccatggctg	ccttcctgat	acagaccaag	gacaaccca	tgaaggccgt	1320
gggtgtgctg	gccggcacca	tggccaccgt	cgtggccatc	actgtcctca	tctccaccgc	1380
caccttctgg	cgcaacaaga	agtctaakat	ggtcctgcca	atgcggcggg	tgctccgcaa	1440
gcggccccagc	cctgcgcccc	gcaccatccg	cattgagtgg	ctcaagtcca	agagcaccaa	1500
agccgctacc	aagttcatgc	tcaaagagaa	acctcccaat	gagaactgta	acaacaacag	1560

cccagaaagc tctctgctcc cgagagctcc ggctctccct ccaccacca gcgtggcgcc 1620
cagcactggc gcagcccagt ggaccgtgcc taccgtctct ggctctctca ctccgcagcc 1680
gacccaaccc ccgccaaaac ccaaaactat gggaagcccc gtccagtcaa ctctgatctc 1740
tgagctcaag caaaagtttg agaagaagag tgtgcacaac aaggcttact tctagtgtgt 1800
gccctatgac ccccatctt tcctccgcc ctgaccccca ccaccctgct gctcggacta 1860
tgctccccct cctctgctcc ttaaggtcac tgaccctgt tttgcacaat ggtataatcc 1920
ccactgtcct catctctacc gccaccttct ggcgcaacaa gaagttgagc tctgacaggg 1980
ctctagtcag ggccctgggc aagacattgg gctctaggat gcaattggca aatacgtccc 2040
cgttactcaa atccttggca ctactacaat gccctccatt cttcagggct gagaattgac 2100
gagaagccag ctcacccatc ccagacctca cagtccctca ggttctactg ggatctcatc 2160
atcatcctta gtcaagcagc agggccctgg ccacgtggag caacactgac tagaatctgg 2220
atcctgacgc ctgcagctga gagcaggagc aggaaaagga ggctcagcac tgtctcaggc 2280
tggaggtcag cgaacctcgt gggctgtagg aaagcaaag taggtaagg gagagcaagg 2340
atgcacagaa aacacactga ctgtgggact gtgccaggat gcatttgga agatagagca 2400
ttctgtctgg gcagagactg tggaccctgg tatgccacg tgggacagag gacacagagg 2460
tggaagattg atcttgccaa gagtgagggc agatgtctcc agccaggact gccctgagcc 2520
gcaaaatgtc aaagctggag ctatagaggt agccctaaag gcaactagaa gagcatcagg 2580
gctgctctct gaggagctgc cccaccagcc atccttgaag agacaattca gggcagttga 2640
tgaatatcag ggctgagatg tggggagact tccgttttta tccagctctt ttgctcatat 2700
cgcgtaacct tgggaaagct gtttaaagtt gctgatcatc ctcttctca tctgtaaag 2760
aagaaagtag gccctgtcta cctcacatgc aggtctaggg tgaggattga agaaaatagt 2820
ggatgatgagg gctttaacca agtgcaaagc ggcatgaatg caaagtattt ttctgcagcc 2880
cagttctgtg ggtgcagctc ttccagaaag tattaggagc ctcacatcta ctctgccaag 2940
cgccccagca ggcaactgtgc tgggcttagg ggctaccact ggatgatggc attgccgtga 3000
ctcacacacc tctacttctg ttcttccctc actccatccc cgctaccgtc ctggccagct 3060
accgtcagag agaaccagag ctccaagtct ttaatttgcc aagatgaaga aaatgagttc 3120
tcaaggaggg aatgctttgc ttgaggccac acagcaggtt ggtagcaaag atcttgtcta 3180
gccagggcag cccttatcag cttgtgacaa ccttccccag gacagaagtc atacaaggcc 3240
tctgggggta atacaaatag gttgtgccct gctttaagga acctgctatc aggaaatcta 3300

catgtgtgca cagagagaga aaagtagaac agttctttgc atttggtctt acttactaac 3360
aacccttcta gaatacattg gtgatttcat ttaaagagat tgtatgcatt tgtggctttc 3420
ctgatttctg agtctgtgtt tggaggtgtt actgagatgt gccagtgtgc agaatccttg 3480
ctggggtttc tacagtcccc aacgtgaaca gtattaagca agaggtggac tcgagcaatc 3540
caggagccca gactgagcaa ataagtactt tccagcctgt gtttcaggag aggactgtgc 3600
tggatcatgc ttgccctcca cagggaatac agcatcctta cagcttgcatt gcaatcaacc 3660
tcttttgtaa atggaaaata aagtctgtta cccaaaggcc atgctgatcc cctgctccct 3720
gctttcattt atgtttgttg acctgtggag accagtcttt ctgacacaca gtgaagctca 3780
actgcctcc tggctgcttc agcaggtgga tccattcttc gacccccaga tgtgactcta 3840
aagaaggctg aaaatTTTTG tccaaattgc catgcagata tcttgaacag caggacattt 3900
gcaggccttg tctactggac ttttctccca aacaggacaa gccaggcag ggctgcatgg 3960
agaggaatgg aacctggagc tagaattaat tgcccactct cccaccctac cagtgcagcc 4020
cggcaagggc aggaattggg aggcctaggg tgggcatgaa agcttgggaa gcactgtcgt 4080
ctctcagaca ggcgtcctaa agacctctag gctggaagct tgggcttgca agtggatccg 4140
ggaccgaggg tggctctctg gacaacccca ggaacttgga ccaaggcaga gccaatcttg 4200
caaactggcc atggatgggg aagtgcccg tagccagcat gagccacact aggaaagagg 4260
aggaggggtgc agccaaactt aaggcaccgg caagtgttgt cagcactgga ggagaccccg 4320
ccagtggggt gaggccagcc aagtcctgt gtacgaatg gtgggccaag gggctgtctg 4380
ctcggctcca gtaggacagg cagagctcca ggctggcacc atggtaggcc tccaggga aa 4440
gagctgggag gcaggaatgg cactctgggc aggcctgccc attcctggcc ctgagaatgg 4500
agctgtagcc tcatggacaa taaatggatg tgacacc 4537

<210> 357

<211> 3758

<212> DNA

<213> Homo sapiens

<400> 357

caaagtctgg aaacatccga aatctgaaac acatttggtc ccgagcattt tggataaggg 60
atctgcagcc catactgcat tttcaaaggc ttttcagcca cggggaatgc ttccagtcct 120
cctctgttgc tcccttccac aaacatccag ctcaacgagt attctattca tcagaagcag 180
aattaaagat cagaccctat gctctttttt tttttttgag acagagtctg cctctgtcac 240
ccaggctgga gtgcagtggc gctatctcgg ctactgcaa cctttgcctc ctgggttcaa 300
gtgattctcc tgcctcagcc tcccaagtgg ctgggattac aggcgcccgc caccacgcct 360
ggctaatttt tgtatttcta gtagagatga ggtttcccc atgttgggtca ggctgggtctc 420
aaactcctga cctcgtgatc catccacctc ggccctcccag ggtgctggga ttacagacat 480
gagccaccgt gcccggcgcc ttatacgatt tctgcagaca acataggcag aggctgagag 540
agtcagagaa cacgtttgag cctgggtccc tgtcttagtg aataggagat ctcgagcagc 600
aagttcctcc acctctctgg gtcttttata ttcttcatct gtaaaatgga tatataagag 660
tggtacttac ctcatagact attgtaagaa ttaaacaggg tactctatgt acagacttag 720
cacagtgcct ccatgtaata gtgttggaca aatattagct attaaaatat cctcaccatt 780
taaactttaa aaaaaaaaaa atctgtgccc aggctgccgt gcagtagcat ggctcactgc 840
agccttgaac tcctgggccc agaaggctct cctgcctcag cctcatgagt agcgaggact 900
ataggcatgt gtcaccaggc cattttttat agaaatggaa ctcgctgtgt tgcccaggct 960
tgtcttgaac tcctgggctc aagtgatcca tcctcctcag cctcccaaag tgctgggatt 1020
acaggtgtgt gccattgcac ccggcttccc cgtttgaact ttcaaagcta atcatgctgt 1080
gtggtatgag gttgagggga aaaagggatg ccccaaatta atgaaactaa atcttccaga 1140
tgctttcgcc agcgccgtgc gtgttctgtg ttctttctgc ggtcccatcc tgggtatgac 1200
agtgaatttt aggctgggct gtgccttcgg ctgtgcaggg cctcctgctt agaggccctt 1260
tgtctgacct ttggtgacac agcagtagca gcgtcaggg tctgtagtgg gcgtgtgggt 1320
ggccagggca agccctgcac atgtgcctca gggagcattg gctggcccgg gtgagccac 1380
ccatttgtga gttgctgagg ccaccgtgcc tgcggccggc gtcctggcat ggctgagccg 1440
ggccatctgc tgccttgtgg tctctgcctc tgcctttcca actctcactt gtctcctgc 1500
tcccgcgtga agaggggggag gggaggagt gggaacacgt cctcatgctc ggcttctggc 1560
tggcagtcac gatgggggac agggaaacctg tgctgtcac aggtgtcagg aggggcttcc 1620
tgggcatgc ttgggaggag ctgggaagct ggcgtatgtg tggggggcag agccctctgc 1680
cacacaggtt tcagaaatcc ttttgcagac ggcagtgaga acttgagact tcagtgagag 1740

tgttgtcagc ctggcgtag tgttgaagag ctgggtcggg aagttgccca cccaagaggc 1800
aacttgagcc atgtaaaagt agtgcgtggt ttatgggggtg tcgggtcttg cgtgtgcctc 1860
tgggcctttg ggtaaagatg ggggtgcaccc gtgagagcag tggtagatca ggtctgtgag 1920
ccacccttac tcctggggaa tggctcagag gactggtagg cgtgaggcat gaccctgggt 1980
tcttgccatg cggcttagga acagggactt ttgacttccc atcagctctc ctctttgaaa 2040
gcacccttga ccctgaacga ttttgcattg ctgtaatttg aatgtcgtgt gggttacagga 2100
cccggtcagc ccaaggagca ggggtccagc agctctgcgg aggcattctg aacagaggag 2160
gaggaggaag tgcccagttt caccatgggg cgatgacaat gtttgccaca gcctctgcct 2220
ggaacctggc tcgtgctgtg accagaaggg aaaggcggct gtttggtctt ttctcccccg 2280
caaggacccg ctgaccgct ggatggagag caaaggagac ccctcccag ccgctcacag 2340
tcctgtattt ggcaggtttg ggagcctgag gggccatctc cctgacactc agaggcactg 2400
ccttgcagac accatccgtg ctcttggtta agggggacag agagcctcac cttgccacat 2460
atttgaacag tgatgagttt ggggctgggt tctgggaagg gaacgtttat ttagtaaaga 2520
gcagaacacc cttgcgtttt gttgggacat gtggaccgtg agtcgcaaac actctggaga 2580
aggctgagat gccaccattc ccacggggac tgaagacaca ttacgtggac ctggtcccag 2640
gctcagttag gagatggcct cagctgtggg gctgggtccat gttgcccact cactccagt 2700
ggaagtgggg accacgccat agagggtctg ctcccactgc agtcccggg gctctcgtgt 2760
tctgggaagg cctgggtgtg tgcacaagga ggcccggg ccagggggctg 2820
ggtcacaagg gcacagggtg tgtggaaagc gctgtggggg aagagccggg caccggagag 2880
tgagcaggcg gagactcaa gctgggctga gccagagcag aaggcgaggg attcccagcc 2940
ggacgggggt tctctacca acagctgtga ttcatcccg aagtggaagg gggctctaac 3000
agaacaggct gagagaggcg ggactgggtc aagtgggtgg agtcctcct tgcattgactg 3060
caactgtcgg ggctttccgc cggctcacag cagttggggc cagcggggag aagagaggcg 3120
gaactgctgt gtcctcatgt ggcgcagcct caaactggca tccaggcact gggcccgtgc 3180
agagaaggca cctgcagaga gcagggcagc ccggcgcagg ggcattgcgc tagaatccca 3240
gctactcgga aggccaaggc aggaggaccg cttgagtcca gggattcaag gccaacctgg 3300
gcaatagagc gagaccctgt ctcttaaaaa acgatgatga tgaacacaga ggacggggca 3360
ctgtgctggg agccaggggg cctgggagga gccgagacca gccttttacc tcggggtttt 3420
gaggccaaca gggacgacag agacagtttc tagttagagc cttggctcca tttttgatg 3480

attcagcccc gagttcctga gtctatttta tgcccccttac gtactttgat agaactaagg 3540
 aaatagtggg tttgagtga gggaaaggaa acccagaaac attttacgtt gcttttactt 3600
 ctgtagtgta gattgccccg gccctctctt gagccctgta gcatctgtga tagcttctgt 3660
 cccttcacg gttcatgtca cagggaatctt ctttcccagg aagcggacac ggagagtcag 3720
 ccctaataaa tgagcacatg ccctggctgt acattttg 3758

<210> 358

<211> 4042

<212> DNA

<213> Homo sapiens

<400> 358

ggtaaacgg aactctttga ctgctagtct agacaaactc ctgaaggaag caactggaac 60
 ttcacctct cccttgcaag ccaagttggc gcccgttatc actggaacca actctaagct 120
 ggaagagggg agatTTTTTg gaaaagggat agaacagagt cacaatactt cagctgataa 180
 gagagaaata ctagtcctt ttccagttag agatgaaact tttggaaata cagctctcct 240
 caagaaagct gaaagtggg agtgccagct aagcacacag aatttgattc aggtggctgc 300
 agaagattct catccattgg atccaacttc ccagctttcc agaaagggtt cttttgggga 360
 tgtggccagc cctccccaag atatgctttt tccccagggt gctcatcttg ttccccaggc 420
 tagggtagac cttctcaaa tggaaatttc ggagactgta gagaaagtca ttcttcacc 480
 cagacctgta ttgaatgat taagtgtgc attacagaag ctgtgtggag aagtatggtt 540
 aagttatcca gctggaagg aagtaggtcc tggagaagtg aaccagaat ttcctgaagc 600
 agtacagcca gtatgtagcc ccctaaatcc tccaggagtg atatcaccat gggctacgat 660
 ggacaccata gttccagaca ggaaggattt ttattcctcc aatgtagttc ctgataaaac 720
 tcatgaagtt ggatcttatt tagctgcca aatgtctcca tcagaccaga cgcttagctc 780
 atttgcttcc attgttgccc aatatggcaa aggcctccct caggaagtgg aagaaattgt 840
 gagggaaaca attgttcaac ccaaatcaga gttcctcgaa ttcagtgtg gcttagaaaa 900
 actactgaag gaagaaactg aaaccttccc ctcaaaatat gaaagtgata cagggaatct 960

ttctccatca aagttaatag gtagtacaga ggagcccagg cgagccactt ctgaatgcca 1020
tcctgaggaa ttaaaagaaa cagtagaaaa ggccgaggct ccattaataa ctgagagtgc 1080
ttttgatgct ggttttgaga aacttcttaa agaaataact gaagctcctc cttatcagcc 1140
ccagggtgtca gtgagagaag aaactcacga gaaggagtcc tcacagtcag agcagaccag 1200
gttcttgggg acagtgcccc atttttacag ggcagcctca cagacctctg aaatgaagga 1260
taaaagtaat ggtttggaat ctcaagtcaa ccaatgtgat aaaatgttgg gaggagacgc 1320
acttgtgact gatttattgg tagatttttg tggttccaga agtggagttg agatccctag 1380
aaccacacaa ctttatgtgg ctcatgaaat agggaccatt aaaactgtaa cccccacaga 1440
ggacagggac agtgaaagtg gggttgcagg gggacaaggg actcttcagg aacctggctt 1500
tggagaggct tctgaagcaa ttagtgtgtc cagaaatagg caaccattc ctctcctgat 1560
gaacaaagaa aactctacaa aaacaagtaa agttgaactg actctagcat cgccatatat 1620
gaaacaagag aaagaggaag aaaaagaagg tttctctgag tctgattttt cagatggaaa 1680
caccagtctt aatgcagaga gctggagaaa tccttccagt tcagaagaag aaccagtc 1740
tgttttgaaa actttgaaa ggagtgccgc taggaaaatg ccttccaaaa gtctagaaga 1800
catttcatca gattcatcaa atcaagcaaa agtagataat cagccagaag aattagtgcg 1860
tagtgctgaa gatgtttcca cagtgcctac acaacctgat aatccatttt ctcacctga 1920
caaaactcaa aggatgagca agtctgttcc agcatttctc caagatgaga gtgatgacag 1980
agaaacagat acagcatcag aaagcagtta ccagctcagc agacacaaga agagcccag 2040
ctctttaacc aatcttagca gtcctcttgg catgacgtcc ttgtcttctg tgagtggcag 2100
tgtgatgagt gtttatagtg gagactttgg caatctggaa gttaaaggaa atattcagtt 2160
tgcaattgaa tatgtggagt cactgaagga gttgcatgtt tttgtggccc agtgtaagga 2220
cttagcagca gcggatgtaa aaaaacagcg ttcagacca tatgtaaagg cctatttgct 2280
accagacaaa ggcaaaatgg gcaagaagaa aacactcgta gtgaagaaaa ccttgaatcc 2340
tgtgtataac gaaatactgc ggtataaaat tgaaaaacaa atcttaaaga cacagaaatt 2400
gaacctgtcc atttggcatc gggatacatt taagcgcaat agtttcttag gggagggtgga 2460
acttgatttg gaaacatggg actgggataa caaacagaat aaacaattga gatggtaccc 2520
tctgaagcgg aagacagcac cagttgccct tgaagcagaa aacagaggtg aaatgaaact 2580
agctctccag tatgtcccag agccagtcct tggtaaaaag cttcctacaa ctggagaagt 2640
gcacatctgg gtgaaggaat gccttgatct accactgcta aggggaagtc atctaaattc 2700

ttttgttaaa tgtaccatcc ttccagatac aagtaggaaa agtcgccaga agacaagagc 2760
tgtagggaaa accaccaacc ctatcttcaa ccacactatg gtgtatgatg ggttcaggcc 2820
tgaagatctg atggaagcct gtgtagagct tactgtctgg gaccattaca aattaaccaa 2880
ccaatttttg ggaggtcttc gtattggcct tggaacaggt aaaagttatg ggactgaagt 2940
ggactggatg gactctactt cagaggaagt tgctctctgg gagaagatgg taaactcccc 3000
caatacttgg attgaagcaa cactgcctct cagaatgctt ttgattgcca agatttccaa 3060
atgagcccaa attccactgg ctctccact gaaaactact aaaccggtgg aatctgatct 3120
tgaaaatctg agtaggtgga caaatatcct cactttctat ctattgcacc taaggaatac 3180
tacacagcat gtaaaagtca atctgcatgt gcttctttga ttacaaggcc caagggattt 3240
aaatataaca aaatgtgtaa tttgtgactc taatattaaa taagatattt gaacaagcta 3300
ggaaaattga atttctgctg ctgcttcaaa gaaaaagctg cccagagca ttaacatgg 3360
ggtattgtta agaagcaaaa tgttcttggt tgccatcatg tgtttcacac cacaattctg 3420
tgccacagtt aagagggtct ggtacccttg caggacctt gtaggttgtg ggaaaaagtc 3480
gcagaaagat actcaaagtg gagcaggga tggagacaga catcagtgat gataaaaaaa 3540
aaaaatggac ctaagaaac tatttactct gtaatctcta ataaaatatg gaattccata 3600
ttagggcaat gagactgaaa ctactggtgt ttttctgcct tgagaaaaca aacagttaaa 3660
acaagcctca aatgtatttt agtgccaccc actggccata ggtacaattc agttgttggc 3720
ttgttttgac ttaattctaa aataggtctc aagcctgtat ttttatgagt ttatTTTTTT 3780
aaaaccctgc atatatatga ttgtttttct tataacttta ctatatgaaa gcagcataag 3840
agtagtcaca aacatgtttt gcaacaaagt ttaattaga atgtaagttg ctcagttata 3900
ctgttcttct tatgtatgta aaattttcgt attttgtaaa aacccttaga ataaattatc 3960
atttgattta aattgtatta gaaaattagc gtgacttctc attttaaata aaatatttta 4020
ggaattctaa acatctaaaa ag 4042

<210> 359

<211> 3365

<212> DNA

<213> Homo sapiens

<400> 359

tattctcatt	ttagggagga	aactgaggca	caaagcgatt	cagtgacagg	cctgagctcg	60
cccagcgaat	gatgacaggg	tgtggactgg	gacctgtggt	tggccccagc	ccagcctctg	120
accactctgc	tctattgccc	ctaggctgca	agtgacagctg	caggttggcc	tgctcctgcc	180
tcctctcctt	gcctgggcct	ttgggcctgc	tccaccttcc	cctggagcgc	tgctcctcct	240
ctgcctgctg	gcggtctagg	cactgctgca	gccccactga	gaggtcctct	tccaggacac	300
accttgggca	ccttgggttg	aattcttttc	cctatgactt	tccctcagag	gaggagacac	360
cttcagatgt	gctctgcctc	cttactgaac	agcctggagg	acaggccagt	ctccagttcc	420
tattgggagc	ccctgaggcc	atgctcagcc	tggctcacc	ttccctgagc	cgagttgctg	480
tcagagttcc	agggaggaaa	agaccaggga	ggctggagcg	ggcaggagtg	gcttcctgga	540
ggcagagggt	ctgagctctg	ggggaggagg	atggcattcc	atggcctgtc	ccaacagggg	600
ctcttgcccc	tcctgtttc	tggtgcaagc	agagggtctc	ggaccaggc	cagcaaggca	660
gctcccgggg	ttggaatctt	ccttcgctcc	caactccatc	ctttctggaa	accaggaagc	720
tggggccagt	gtccagcact	gcctctggca	gcctggcctc	tgctctcttc	tgagaagcct	780
tcagggaagt	tgactgccc	ttcctgcca	ctgtccccag	ctgtggaat	gcccttcctg	840
gcgtctgccc	tgagcctctc	cagctgctgg	gaacttctgt	gaatgtgtcc	tctgtgcagg	900
gcactgggcc	aggagctggg	actgggaggt	gagagagacc	agaccttggc	ttttagggagc	960
tgagggtttg	atgggagaga	ccgatgtaga	aacctggaac	ctggcacggc	caaacaggca	1020
gctggagctg	ggcctctgga	ccccaagagc	tggggtcaag	acccaatggc	tgtggaggcc	1080
ctgtgttgcc	ttggcaacct	tcttccctct	ctgggcctca	gtttcccat	ctgtacaatg	1140
taaaatcagc	aggctagctg	atctctgaga	gtgtttccat	atttgataac	ccatgaattg	1200
tatttcaaaa	caagaggccc	gtgcctgac	cagtgtttgc	aagtgatgc	ctcgtgatgc	1260
ctcagaccct	tgggtgttct	caggacactg	ataggcatct	cttgaaggac	atttgggaaa	1320
cactgctttc	tgcttctct	ttttagagat	gtaagggtgg	gacgtggtgg	ttcgcgctg	1380
tgggtcccagt	actttgggag	gccagggtgg	gaggattgct	tgagtccagg	agctggagac	1440
cagcctggac	aacatagtga	gacccccgtt	tccattgtta	ttattattac	tattattatt	1500
tgagactggc	tctgttgccc	aggctggagt	gcagtggcgt	gatctgggct	cactgccact	1560
tccacctcct	gtgccaagc	ggttctctc	cctcagcctc	ctgagtaggt	gggacactgc	1620

cggcgcatgc caccatgccc ggctagtttt ttgtattttt agtggagacg gggtttcacc 1680
atgttggcca ggctggtctt gaactcctga cctcgggtga tttgcctgcc tcggcctccc 1740
ggagtgcctgg gattacaggt gtgagccact gcgcctggcc accattattt aaaacaaatt 1800
ttttttaaac tgtttaagta aaagagatgc attgcctcta agcatgctaa aagtctctaaa 1860
ttctgcagtt aaaaactgct ctttaaaata tttaatatga atctttaatt tattattcta 1920
ttatttttac cacctattaa catctttagt agtttttgat ggaaaccagt ttcaccctgt 1980
tctggagagg acatagtgc ctgaggtgga tgtggaggca ccatggcccc tgagtगत 2040
gtgcatgttc cttactttgg ggtcacctg ccttggtttc caactccgtt cagacctgtt 2100
tgacgtgtac caggtgacta ctcagtgtca ggccagggaa gcagctgaat agaatatggc 2160
actgaccccc agttccctgt gttcccatgc cttcagagtt ctcatgtcc tcctgcattg 2220
tcctgctgg ggtgtggact tgagggtgg gtccttccca cctcctccgt ggtgcctgtt 2280
acataggagt gacgtcagca gatgaagggc ttgcatggaa gagaatgtgt gcaggcagca 2340
tgtggggagg gagtगत gcgctcctga gttaagacag tccaggttta aaaaaacatt 2400
gtagagatg gtgtctcgaa ctcttgggct caggtgatcc ttccgcctca ccctcctgag 2460
tagctgggac tataggtgtg tgccaccgtg cctggctcta gctccaggtt tgaatcctga 2520
cacctccatt tattagctgt gtgtccttgg caaatgagtt aaggtctctg agtctcagct 2580
tccttccagg ttgtggtgag gattaaagca gataaggtat gtaaactt aagacagggt 2640
ctggcacatg acggaacca gtaaattgta gctattgtta ccagcagctt ggggatctgc 2700
cgccaagggtg gctgttggtt gaccttgggt ttagagtagt cattgcttct tctttttttt 2760
tttttctaga cggagtctca ctctttcact ctgttgcta ggcttgagtg cagtgggtgtg 2820
gtcttggctc actgcaacat ttggctcccc ggttcaagac caggctggtc aacatggtaa 2880
gaccgggtct ctactacaaa aaattggctg ggcgtgggtg tgcgcgcctg taatcccagc 2940
tgctagggag gcggaggcag gagaatcgct tggacctggg aggtggaggt tgcagtगत 3000
cgagatcatg cactgcact ccagcctagg tgacagagag agactctgtc tcaaaaaaaaa 3060
aaaccaaaaa acaacaacaa caacaaaaca ttaaaaaagc cgggcgcggt ggctcaggcc 3120
tgtactccca gcactttggg aggccagggc ggggtgggtca cctgggggtca ggagttcgag 3180
accaggctgg ccacatggcg agatcccgtc tcttctacaa aaaattagcc gggcttgcgc 3240
ctgtaatccc ggctactagg gaggttgagg tgggagggtc gcttgggccc gggaggcaga 3300
ggttgcagtg agccgggatt gcaccactgc actccagcct gggtgacaga gtगत 3360

gtctc

3365

<210> 360

<211> 4025

<212> DNA

<213> Homo sapiens

<400> 360

atttgaaaaa	aaaattagaa	actgcgcaac	cacaggaaaa	ccgcctggca	aagattcaaa	60
gtgtaggcaa	aaacctgcag	agagtgaaca	gagtcctcat	gggcccaagg	agcatccagg	120
aaaggcactt	caaaaagggtg	ggaaagcaca	gcactaggaa	agaacaggat	gcccaggcat	180
ttgtggacaa	tgctgccaaa	ggaaaaaggc	ttgagggtcc	agccccaagg	gagctggaac	240
agcctcacat	agtgcagggg	cctgagaagg	tagtgggaaa	caccatctac	accaagcctt	300
cattcaccca	agagcataag	gcagcagtct	cctctgtgct	gaaacccttc	tccatgggcg	360
tgccctctgc	ctctagccct	gcaaaagccc	tacctcaggt	cagagacaga	tcgaaagact	420
tagcctacac	cattttaatt	ttagaaatgg	caatggctag	agtgaaaaac	atgaaggctg	480
ctaaaccaat	cacacattcc	agaaaaaaat	agcgctttta	taaaactcac	tccattgtgg	540
cccacagaac	acccaaggcc	aaaaagatta	gaaagtttag	aaagggcagt	tatctcaaca	600
gaccgatgct	cgcaaagagg	ccgctgttct	ctgcagcaaa	gagcctcata	cattcgcaag	660
ggattttttc	atccttagga	gacctgagtc	ctcaagaaaa	ccctcttctg	gaagtagttg	720
ctccttcaga	acgttttaca	gaaaacacta	atgtaaaaga	cacaactaat	gtaaaagaca	780
caaaagagat	gtgttcaaag	acacatctct	gaaaacacaa	actacaatca	tcctcctgag	840
gcagtttccg	ctgggactgc	attcaactta	gaaccaactg	ttaaacaac	tgagacaaaa	900
tgggaataca	acaatgtggg	cattgacttg	tcccctgagc	ccaaaagctt	caattaccca	960
ttgctctcgt	ccccagggtga	tcagcttgaa	attcagctaa	ccgagcagct	acggtccttc	1020
atccccaacg	aggatgtgag	aaagttcatg	tctcatgtta	tctggacctt	gaaaatggaa	1080
tgttcagaaa	cacatgtgca	aggagagctgt	gccaagctca	tgtcgcgaac	aggcctcctg	1140
atgaagcttc	tcagcgagca	gcaggaagca	aaggcattga	atgtagaatg	ggatacggac	1200

caacaaaaaa caaattatat taatgagaac atggaacaga atgagcagaa agagcagaag 1260
tcaagtgagc tcatgaaaga agttccagga tatgactata agaacaaact catcttcgca 1320
atatctgtga ctgtcatact aataattttg attataattt tttgttttat agaggtaaag 1380
acaataatta attcaggttt tcaaaataca atcctgtgtt tgtgtggatt cagaatccac 1440
aaactgaaaa ccaacgtcac tttcccactt gacattcttc ttctgtcatt taaggctgag 1500
gtgtgctttg ttcttttact gcaatgtata ttccaggatt gttaaaggat cctcgcttcc 1560
aggaggcttc tgtgaaataa aaccaagtta atcccactag actatittaa gaagttaagt 1620
tgatataata gcaaaatttc tcccacccaa aactatgtca acaattggat gtactcactg 1680
agtcaccctt tactctgcca ctaattttatt tccttgttgc ttaaagtatg agagacatat 1740
aatctccacc ctcacggagt tgatcatcacc ctggagagga agaagacagc caaaagagag 1800
aagtattgtc ttgtagactt actagattca catagtatca tccttctcca gtgtgtaagg 1860
tgttgtctaa ataggctccag ttaaagaact acagggtagc cattttttaa aaaaaatttt 1920
ggccacgttt tcaaattcac aggggagggg gaatgtctca tactccagcc ctctgagcc 1980
taggccctct gtgagatgtg tcaccatttc ttggacacca tatgagacat tccccctcgg 2040
attagagatg ctcaacctgc atcaacaaat ctaaagcctg catctggcta ccctggggcg 2100
agtcctgttt acagtgccta ttcttgagc tcgcctcttt ttgccttttg tttgattatg 2160
tgatgtatta cttttcccag caggccagtg ctagcatact ggaagaggga ttttaataagc 2220
tggcaccctt gatgctatgc tcctaattca accttatttg cctcattggc catttccatt 2280
atggtggcag ccctccattc cagccacagc agccccctag cgtccccag tcacactgtc 2340
cccattgctg ctcatctgtg cctttgtcca tctacaatgc ccttatttca ctctgcctgt 2400
gggagtcctg tgaatctctc caaagccaac tcagttcatc tttctgcttg aaaccttccc 2460
tgaataggcc aggtgcggtg gctcacgcct gtaatcccag cactttggga ggccaaggca 2520
ggcggatcac aaggtcagga gatcgagacc atcctggcta acacagacca ttctctacta 2580
aaaatgcaaa aaattagctg ggtgtggtgg cgggcgtgtg tcgtcccagc tacttgtgag 2640
gctgaagcag gaaaatggca tgaacctggg aggtggagca tgcagccagc caagatcggg 2700
ccgctgcaact ccagcctggg ggacagagcg agactctgcc tcaaaaaaaa aaaaaaaga 2760
aacttccctg aatattccag ccctcctgag cctagtcctt ttgtgagatt tgtccccatt 2820
tcttgacac catataagag acttcagagg ctgaagtggg aggattgctt gagcctggga 2880
ggtcgaggat gcagtgagct gtggtcatac cactgcactc tagcctgggc aacagagcga 2940

gacctgtct caaaaacagc caccaccaa aactatcttg ggatttgaat aggattacct 3000
 taaatttgta gattaatttg agaattgaca tctgtacgac attctagaac atgggtatttc 3060
 atgtcatgta ttcatttctt gttaatgtct ttcagaagag ttttaggggt tccatcatat 3120
 agatcttaca cgtcttttgt tagataacag atctttgtat tttgttcct aaatacttca 3180
 gacatttgta ttgccattgt aaatgggagc tttcttccat tttctagtta gttattgggtg 3240
 gtacatctga aaagcatttg aggtttgtgt gctgctctct tgattttgtt tctagccacc 3300
 gtactgaatt ctcataattac ttccagtaaa atcttagttg attctcttag gcttcttttg 3360
 ctaacattta ttattttata tgcaaataat tatagttttg tctcttctt ttcaatactt 3420
 acactcttcc cttcttttcc tttctttttt tttcttttct cagggccttg ttgtcaccca 3480
 gactggagag caatgggtgtg atctagctca ctgtaacctc aaactcctgg gcttaaggga 3540
 tcttctgcc tcagcttctt gagtggctgg gactacaggc aggcagtga ttttaaact 3600
 tttgggttag agacaagatc ttgctatgtt gcccaggctg gtttctctgc cacttttagag 3660
 caggtttcct ttttttcata cttttaagag gtttttatta ggaattgtcc attgaatgtt 3720
 agctaaaaca gtcaataaaa tgcgttaagt accagctaca tgcaagacc taagttagat 3780
 acagtcagcc ctcttcatca gcaggccac atcttcagat tcaactagat aaggctgaat 3840
 atttgaagaa aaaaacaata aaaatacaat tagaaagtac agtataacaa ctgttgccat 3900
 gatacaatat ctatacttt tattagtgt gacctaaagt tcatgggacc aggcacgggtg 3960
 actcacactt gtaatcccaa cactttggga ggccaacctg ggcagcatag tgagaccttg 4020
 tcttt 4025

<210> 361

<211> 3845

<212> DNA

<213> Homo sapiens

<400> 361

tttcatgttc tttagaccgg tttttctcag aataatgtct acatacatc ctcttctaatt 60
 gtgtgacatg aatttaatat ctttctgtta cccactgtga atgttaggct gttttcaaat 120

tatccacaaa ttattcttgt aatcacccaa tatttttatg tgggtcctct cttaccatt 180
atggattaag atagttaa acaatttaaca atgaggatta aatgagaagg caaactgtta 240
acttctcagc tgtcagaatt tgggtggaag ggaataatgg aagcctcttt tgtgatccgc 300
ctgacctgct gtcattgtat gtactggggc tgctgcatct tgagctatca gggctgacct 360
gtggaatgat tctagcactt gctctgccac cttgccagaa gttcgtttcc tgctttttac 420
acatgtgtag cacttctctg ctaaaattga atggttttta actaatgtat ttttagctta 480
agagggtgtg gtcagttaat tattgaattt ttttttttc ttttttaatt ctgtcttgcc 540
aaggcctctc tgggtttcag ggcccaagag aaaacagtgg aagaaaggat tcagaatttg 600
ggcaagggtg aagtaactgt tcatgcaagt taaaaatacc taagtaaagt ttttgaagat 660
aaaattgtgg tttcagaata atgctgattg ttggagactg taagaatcag gtgcacttga 720
ttttgcatat aagcaaattg taaatctatc agagtcctaa aacagacaag catgaactct 780
tcccattgct ggaactaagt gccacagtg tcagacaaaa tggacattga acttggattc 840
tgtgatacac agggcacttg atgcttaaat gaagatggaa aggttagcaa tacctgggtg 900
tcagttagaa tttgagaatt ctatatgttt acatatttaa atgtgcatct tgatctggtg 960
ggcttcccat gtggagactt gcaactctaat taactaagaa gaatattgcc ttgttggatc 1020
tcagtccacg tgcttgcaact gcgatggcaa tggcctcttc ctcaaaatac taatttgtgt 1080
gccaatttgt ttaaaattat ttgaaggcag ttcagcctaa tctcagtgtt ctctttctgg 1140
ggtagatgag atggattctt aatatttctg ggagtacttt ttaatgagag aattgtcaaa 1200
tttgaaaga tttattgagc cttaggttac atggacagt taaagcttaagt aaactgtata 1260
ttgattatca aacacaagct gtaattggaa aagttgagag gaaaagcatg agatcacaaa 1320
ttagggggaa aaaagaaaag ggatttttaa atttgggtga ttaaattcat tgtccaaggg 1380
ggaaaatgaa taatgtttca ttagattcct tatatgcaaa agtatttatt ttgaacatgt 1440
gtcctaaaat atatgcacta actgatgtga ttaaaattgt ccaagaaata aacttgagca 1500
taacatactt tgtgtgcacc acagtaagct attctgcatt gaagtgggtct tttataacta 1560
aggcctggac tttgctccaa cagagtcgtg gtcttctgaa tagtgactta aggagttttg 1620
tttgcttaag tcagataata gcacattcac agggaaacaa agagagttgg tggatagaat 1680
tttctgacta ttaatttttc ttccatgaaa ttttattatg cctttggcac tttctgccac 1740
tcttacagca taccacaaga tatctgttta gcagaagatt atgtagttac ttttaattta 1800
atataaaagt agcttgtgat acattaccaa gagatctctg attctttagt aagtttgaga 1860

acacctattc tacagagatg ataggtactt agaaatgaag actttaaaagt acattttaat 1920
ctaatatagg ccagtaattg ggggaagggg ctttgagcag tacaatttta agatgatttt 1980
gagggttgta tttctttatc atttaaaaat atcctaaagt cagtaattta tatgaaggaa 2040
actcattcat tattgaagggt attaaaaata gccatcatct gtattaggta gcagttttgg 2100
aggatcatct ttttcttttg ctataaagcc ctattaatga agaatacttc cagtagagtt 2160
aatagctgta gcttacctag tgtgttaatg aagtgtgttt atttatgtga cttgatacca 2220
gtagtcataa tagagactga agaggtatgc gttaagcacg cctacttcta tgcagtaaac 2280
aggctgcagc tgcctagatt agattcttag aaatgtcata ttttgaattg ttttatttct 2340
tgtaggggaa gctttgtccc acttcattca tttgcatgcc ataggaatta catattgggt 2400
atcattacgt atctaacaag attcagaaac aaaaatcttg gacttttcac atccgaaata 2460
tgtcagctct taataaatgt gtgggtgctta agtctacata tggcatccat agttgatcta 2520
gagtatggat atgagtgtgt tgaccagtta tcagtaggtg gacaaatatt tgggcatcta 2580
cagatgagac tatgcactaa gtgtggactg agtcctaaag aagcttatag tcaggtgttg 2640
tttaaaacat tatcagaatt cttaaaccce aggaatttaa ttttatttgg tatttcttaa 2700
gcctaaaatg aaccaagaga aagatgattt tagaaagtac ttgtagtgaa agatgatttt 2760
agaaagtact tgtagtgcac gtgtggcttc tgacttttgg gatggcacca ttttataata 2820
gtttcaaaat ttagcttttg aaattctcaa cattttatgg tagaagactt tggacctcaa 2880
gtataaaatt atacgtttat aattttttta aaatttaaatt tataagtatt gtgaattcac 2940
actctcaggc tattgtctga cttgatctac gtctcataaa gcctgtacct gagtggagtg 3000
gaaggtggag tcttaggtta atcagttact gactctaccc tcaccctctt tcaattgagg 3060
taaactttgc tgtttttctt tttcataaag cattctcaaa ttgttgagtt tattgctgaa 3120
aaaaatctcc atgactttac agatagaatt acaaactaaa tgatgtcttg tatttagaag 3180
cagagtacag acctaacgaa ctgttagatt ctccaccatc acttaggggt tgcacagaag 3240
caacaccaga gaattacaga cagcgcgctt ttgctgaact gtccattttg gtggttgtgt 3300
ttttcagtca aatataagca ggatgggcga tagagatata tttatatata gatacatatt 3360
ctatatatct aatgcctaaa tatgggtatt aaagggaata tttttaaaagt ctgattaaat 3420
ccaatatgac atgaaattaa atatattgat tagtaaggaa aaatgttaaa aagtagagag 3480
gataccaaga agattaaact ggactagcct tatttgcaag tgaaggatct ggtgctgctt 3540
tcagatgttt atcttttatt tttttccctt aagctttaat cttcgtcatt gtcttaaagt 3600

caactggtgt ttcttgttca ttgactttgg tacgatgggtg ctttgcaagg atgtatttat 3660
 gttataatgg ccaacatttg gtcagccctt gtccacttat tcacttcct ccttttgtaa 3720
 aataagtgt ttaattataa actgtataaa aataccttgt ataaaccct tttttgatta 3780
 ttacaataaa taagctgaat tgtaacaaat gaaatttgat ttttgtaata aaacagtgga 3840
 aaagt 3845

<210> 362

<211> 3765

<212> DNA

<213> Homo sapiens

<400> 362

tgcttcctca aagcattctg taatcagaat gtaaaagctc attagcatca tcagctagat 60
 gttttatcac actgtctcct gggtttttca tttagcttca agaccagcca gccttgatag 120
 tggcagaaca tccactagca atagcaataa taatgcttca ctacatgaag tcaaaggtat 180
 gctgtaggta aatttattaa tgcgctctat ccatttccag tatttaaagg tgggagatgg 240
 gatgaagttt ctggggtaaa gcatgaaatc caaatcatct atgtttggaa catagttgtt 300
 tggaacattt tatacttttc acattgtaat acaaattgtat ttcaatgtat acaaattgtaa 360
 aaacaggagc agttatttag tttcactttt tcactctcac agataaaagt cttatagtaa 420
 tatttatact tcaaaattat ctatatgtcc ttattttact gacattttgt ctttgacatg 480
 aaaatgattg tccttcattt tcttatgacg catggacact cacattactc atattttaga 540
 aatatgtttg gcttaattta tccacaaaat aaggggaagg attttgtgtt taatttgaga 600
 aacaactatt tgtgtatata tatattgaac aagaactata tgaatgcatt tggctcatat 660
 aaggaattat ttcaagattt tttttcttaa tttttaaatg tgcattccaa ggtgaggtat 720
 ttaagtaaat gtctggaaac cttgactgat acctttttct taaagatata ctgcctactc 780
 agattctgga agttgtttgt ttgtttgttt tgagacggag tctcactctg tcgcccaggc 840
 tggagtgcag tgggtgtgatc tcagctcact gtaacctcca cctcccagggt tcaagccatt 900
 ctctgtctc agcctcccaa gtagctggaa cggcaggtgc caacgaccac cacaccagc 960

taattttttg tattttttagt ggagacaggg tttcaccatg ttaaccaggc tggctcttgaa 1020
ctcctgacct caggtgatcc acctgccttg gcctcccaaa gtgctgggat tacaggtgtg 1080
agccaccttg cccagcctgg aagggtttttt gtttttttgt gttttttttt tttttttgag 1140
acgggttctc gctgtgtcac ccaggctgag tgcagtggta ctatctcaaa tcaactgcaac 1200
ttctgcctcc cagactcaag cgatcctacc acgtcagcct cccacgtaac tgggactaca 1260
gagacccatg ccaccatgcc cagctagttt ttttgtatit ttgtagaga cagggtttct 1320
aacatgttgc ccaggcttgt ctggaactcc tgtgctcaag tgaggcacct catccagcct 1380
ctgaattatt tgaccaatat atcatagtta ctctctgtac tccagaattg tcaggttaca 1440
aggaatgcat ttgttttggt cttttttgga ttataaaatt atttgtctc agttgtaatt 1500
ttattttatc aattaatgct atgacattat tacagtgatc tgaaatacct aattttgagg 1560
tgggtttctt tttttaattt ttatcatggt tttcagatit ctttgttctt ttcccactcc 1620
cactacttca tttgactagc cttaaaagaa ataaattatt taaaatggt tttacatcca 1680
gtagaaaaat gtagtctgaa aataggatit tttttttctg atttgaaaat ttaagaaact 1740
cttacttttg taaaatgtta cataacttga gccaaattct ttcgtggccc actttactct 1800
ctgtgactgg gaaacaatgg aaagttgcat tttctgtttt gatgtacagt ttgttcgtga 1860
tcaaaacaaa tccgtactct taaggaacac catagatttg agggagtita attctagaac 1920
tagctaattt tcattttata tagttgctta atgtcaactg agtcttttaa ggttatatag 1980
gcaccatatc aacagaggac agcaacaaca ataagatgat caagacattt aaaaaagaat 2040
aaagcactac atatttgatt gtatactttt actgaaatgt tgtaagtaat tgcttcatat 2100
ctttatttaa ctttccttat gtgtatgcta tttaaatttt tttaaatggt taaagttatc 2160
catgcaggat gaacagagag gccttcaagt agtaatgagg acttcttaga taagcaaata 2220
attaaaatag aattttctgc atttagaaca gtttttggtc ttaacatact gaaataatat 2280
aaaattcacc gcgcctggcc tgcaaggcat tttataacta tttgaacctg aattttaaaa 2340
aatatattat tcacttattt attcattcat ttactcaaaa aatatattga atgctttgta 2400
tgaggctctg tttaggctct gagtatgata gtaaaagcaa gtctttgccc ttatggagct 2460
tacaatagtt gtcagtttga caaaataagg aagcaggcta tggcagacaa ttgttagact 2520
gataaaagat tgacatggtt tactaagcat ttctaaataa agcttgaaag taaatttggtc 2580
tgttcatata attagcacac agtcaacaaa tgttattact catgaagtat taatctcaat 2640
tctattattg aaatctcaac accccattta ctccaaaagc aggtgcagtt aataacaaaa 2700

gcaggccaca aagccacagc agtggagaat ttagcctgct tcatgaccat gaggcttggt 2760
ccagcagtgg tagcagtcca atccagtact tgaaaagaca gaccagatca agcccagtgc 2820
tccagcacia aatatctgaa aacttgagga gtcgacatca caagatcaaa actgggtccc 2880
ctggaagtga agttgttact ctacaacagt ttttggaga aagcaataag cttacctcag 2940
tacagataaa gtcctcaagt caagagaatc ttttagatga agtaatgaaa agtttgtctg 3000
tctcttctga ctttttggga aaagacaaac cagttagctg tggctctggcc aggtcagtaa 3060
gtggaaaaac cccagggggac ttctatgata gacggacaac taagcctgag tttttgagac 3120
ctggtcctcg aaaaactgaa gatacctact tcattagttc tgccgggaaaa cctacaccag 3180
gcactcaagg aaaaataaaa ttagtaaaag aatcttctct gtcacgacaa tcaaaagata 3240
gtaaccctta tgcaacttta cctcgtgcaa gcagcgtgat ctcaactgcc gaaggaacta 3300
cacgaaggac aagcatccat gatTTTTTga ccaaggacag tagactgcct atatcagttg 3360
attcaccacc agctgctgct gacagcaaca cactgcagc atctaattgt gacaaagtac 3420
aagaaagcag aaattcaaaa agcaggtcta gggagcaaca aagctcctaa ttctattacc 3480
cactacatga catgtggggc aagtgagaga aaagtgtcct tcagtttctc agtatgaagc 3540
ctttatttct gaagtaacaa gacacctagc aactatagga atcattttta aaaatcttta 3600
aggagacttt taacagtcct tcgtgaatag agcaggcaag aaatacaaac cttcattcct 3660
tgaatcaagg agcactactg gattcaactg ccaaaatttt ttaaaggttt taggacttac 3720
tataccttgt actgttaaga tctactgaat aaaggacgtt ctctc 3765

<210> 363

<211> 4462

<212> DNA

<213> Homo sapiens

<400> 363

gcttcgcagg taagcccgcc gggcgggcgg cgaccccccg gccggcccct cggggcagag 60
aggagaaccc tgggggaggg ggtgctgcag gaggaccctg gagagagctc ggccctggag 120
tgggggacga cttggagaag gaggatttcg ggggagcatc gtgaggagag gacttggagg 180

gaggatcctg cagaaggcca gcttcctgct gtgttccttg caccaccga tctcacacgc 240
agccctagga cagacgtcca ctggcctgag ttgggtcttg ggccaacacg gagcaggtgg 300
gggtagagca gctctgctct cctggaggaa agttgaatgg ctggaaccaa gatgacagat 360
ggaggctggc aggcaaacac gggaggcctc ctcactccaa gaggggagtc agcctgggga 420
cagttcttct ccaggccctg ctgctcccat cagctgcaac acaggagagg taggcttctc 480
cggaaaagct cccacggtcc tggatcccgc tccaccttct agaagctccc agcgttactt 540
cctgggctgg cctgcacatc gttgcgctac tcccgtccaa ggggggacat attcggtgac 600
cgactcagaa cgcagcctgc ttcccgggtg gccagtggct cagcagtctc ggtgcctgag 660
cctgctccct ccgcccggcg gctgggcagg tggctgaatg cgggctggag gccttccttg 720
agaagacggt tatccatgct gtacatggaa gtgaccagct cggcacctga ggagacacac 780
cgcgcccgat gacaggcgca gagcaggacg tggtagggtc ctcataccta ggaatgcaga 840
acaagggcaa gaaactcggg gcccgctgg catctgccct gcaccagtgg cctccaggaa 900
gttctccacc aaggatgttc cccaggcact ctgtgctcgc cttcaccagc gtcctgtgag 960
gtctttcaca ctgatgggga agcctttcta aagggtatta gggggctggg gggctggggg 1020
tgctgagtac caagggtccc aggaagagac aggccaggct tatgggctgg gcatccagag 1080
atcgccctga cgccagctcc aggtggagtt aggagggcac tcttgtcccg acgcatttac 1140
agaccactcc ctcttcttgt tcccctcgac tctgagagtg tggtagggta gctgtggaac 1200
ctgactgctt gcctgaaggt tgggcagcgt ggctagaaat tgcggcccag acctgggac 1260
tcacccacac ctctatgaga cgtcctgaag gaaaccatcg actgagcgga gaggtctcgc 1320
cttggccgcc tcttcccagg aaggaagagc ggaagaggcg tcgccagcca ccgagactgc 1380
cagccaccac cccctcccag actctctgtc cccaccccag accagggtca ctttcttct 1440
gcactggggg tggggtgcgg taggtttcgc aatccagact gtggggtggg ggtgggagca 1500
ggtgtgtgta aatgagcagc tcgtcaggag tctactgagaa ggaggcagat ggagctggta 1560
cccagcaggt ctctctcat aagcgtcaac cctcgcctgg gcgggctggg ggatcctcag 1620
caccccagct ctgagccagg ggtctgcaac ccgggcacca gcgatgggcc ctcatgcaca 1680
cagggcgccg agcggggccg gaggcaagag tgacttcaga caggaacccg acgccacagc 1740
cgggtgacgcg gacctgggt cagccagcac gatgggccgc tggggagagg agggctggag 1800
gcagagagtg taagtgtgca gccttcatca gcttattttt agtcgcgtta tgtaagtggc 1860
ttcatctcaa cgtcacatgg ggggggtct cagatttaac tacaggatga cagcctttgc 1920

ttttcaagca agctgtttctc ctggcaagcc aggccaagga ttggggagtt ttgctaaaca 1980
gaaggagccc tttctgaggt gaccacccgt caaaacttga acccgcttcc acctccgtct 2040
ccctcttccc gaccagcctc acccagcctc ggctgaatgt ggcctgagag tagccacttg 2100
tccgcaatca cagggaagtt ttatgcctgt caaggagct tcctctctcc tcttctctcc 2160
cctcccacct tctgcctggc agctttgcct tctctccaag agaagggtcc acccaatcag 2220
aactcctctt ctttttcatt cctggattaa agcacttgta atcagtaacc agaaagttcc 2280
agagcgggag agaccgaaa gcaactggagt gctatcggac ggggtgtctgg ggcagagcca 2340
ggagggcgag cctcttctct ccccgctgc ccttgctcac ttccccctcc atgccaggtg 2400
ctgtgggagc agctgggcct ggccggggtc ggccgggtgaa gctatccgca tgggtgtctgg 2460
agcaccgttt ctttgcttcc tggatgggct ggatgggctc ccgtgttctt caccaatggc 2520
agcgttacca gcaccaatgg cagcgttacc agcaagaagg caaaggcagg agcacatcga 2580
gggtgggagc cagggtctgt gggtcaggag tcccgtcct tgccgcggga agcctggctc 2640
agccacctcc agcacacttc ggctttgtcc agcataaaag gcagagcgac gttttcactg 2700
caggctgttt cccaccaggg caagtgggac agggcgagtg ctgacgtctg caggcatggt 2760
gtgcatttag ggggtgggcgg caccgagggg gcatcatttg gcataggcgg gcccgggggc 2820
cactgggcta gatgactggc tggttgtctg gggcaggtgt cacagcctct ctgagcaccc 2880
tctaagtgga ggacagaaca ttgttgggag gagtccaggc ataaagtac ataaacagcg 2940
cagagaatgg gaccagcgca cctgagaggt gatcattagc ctcagcaact ggatgggaca 3000
ttccgaagag ctcccagcca acacagatgg tcaactcaga ggctgacatt taaaaggaag 3060
gggccccggc gggcacagtg gctcacgcct gtaatcaca cactttggga ggctgaggcg 3120
ggcagatcaa ctggggctcag gagttcaaaa ccagcctggc caacatggtg aaaccgcac 3180
tctgctgaaa atacaaaaa ttagccaggc atgggtgggtg gcacctgtaa tcccagctac 3240
tcaggaggct gaggtaggag gatcgcttga acccaggaag tagaggttgc agtgagccga 3300
gattgtgcca ttgcactcca gcctgggcga caagcgaaac ttcgtctcaa aataaataaa 3360
agtaaggggc acagggaggg ggccccagct cgtgccccct ctgtgtgggc tgcacatggt 3420
gacttccttc cagagagcac agagtgggag gtaggcaagg cgtctccaca gtggagagcc 3480
cgaccactg tctcagcca gaggtcaagg ctggcaccat caccgagagg tcacacgggc 3540
agatgtgaca gggcgcttca ccaactgggt cttcctccca gaccataac ctttgtctta 3600
gtattagaaa aacactggca gaccgggcgc agtggcttac acctgtgatc gcagcathtt 3660

gggaggccga ggtgggaaga ttgttcgaga gcagtctggg caacatggtg agaccccatc 3720
 tctacaaaaa aaaatttttt ttttaattagc taggcgtgat ggcacatgcc tgtggtccta 3780
 gccactagag gctgaggtgg gaggatcact ggagcccagg aggtcaaggc tgcagtgagc 3840
 tgtgatcaca ccactgcact ccagccttgg cgacaaacca agaccctgtc tcgaaaagaa 3900
 aagaaaagaa acattaggca aatcccaaca ggggggacact ctacagaaaa accgaccagc 3960
 cctcctgaaa acttccttag tcatcaaac caaggaaagt gggctgggcg cggtggctca 4020
 caccttaatc ccagcacttt ggaaggctga ggcgggcaga tcgcaaggtc aggagtttga 4080
 gaccagccta gccaacatgg tgaaatctca tctctaaaaa tacaaaaatt agccgggcgt 4140
 ggtggcgggc gcctgtggtc ccagctactc gggaggctga ggcaggagaa ttgcttgaac 4200
 ccaggaggcg ggggttgag tgagctgaga tcatgccact gcattctggc ctgggtgaca 4260
 gaatgagact ctgtctcaaa ataaaaaaaa ccaaaaacca aaaaacaacc aagcgaagtc 4320
 tgagaaactg tcacagccta gaggaacctg gagacagctg atccctaaat gtcacgtggg 4380
 atcctgggtg gggtcctggg agagaaagaa gacattggag ggaaactgag gaaatatgaa 4440
 taaagtatgg gctttagtta at 4462

<210> 364

<211> 6124

<212> DNA

<213> Homo sapiens

<400> 364

tcaccagact tgcccttttt gacaattgtc ttgatcatag ttagttggac aacttgtgga 60
 gcactagcca tacttctttc ttatctttac tatgtgttta aggttgttca tctgcaagcc 120
 agcttaacaa cttttaagaa tagccagcct gtgaatccca aacactctag aagaagtgaa 180
 aagaaatcca atcatcataa agactcctca atacaccatc ttcgtttatc tgccaacgat 240
 gctgaagata gccttcgcat gcacagtact gtgattaact tactaacatg gattgtatta 300
 ctcagcatgc cttctctaatt ttattggcta aagaatctta gtaaattggt gaagactact 360
 tcacaatttc cacttcctct ggctgttggg gtgattgctt ttgggtcagc acatttatat 420

aggcttccat gctttgtctt cattcctctt ttactccatg cattatgcaa ctttatgtaa 480
gattggactt aaggaatgat gaagataatt tatgtgttta gggccagtga taagagggaa 540
cacacagatc catcagtatg gacagcaaga tcctttggag aagacaagtc tttttttaca 600
atattgaaaa taggaaatta gttttgtaat gtttgaggga agtagttgaa gcatggtttt 660
gttttgtggt gtggaatcca tgtagtaatc atttttgaaa aattcatgaa gggatatatg 720
gtgatcacta tcattgagga ctctgtgca tataaaatag tctgttttat caactgtacg 780
agaagtctga tatgagagat ttagtagatg cagcattatt tgcagtctca ctgcaagcat 840
tctactcatt tcatcaaaact ttttttcaca aaagtagggt attttgaatt tgctatagtt 900
tacctattaa gaaataagtc tttaaataac tgatgaaatt tatagctgtt tggttttctca 960
aaggttaaat agccacagaa agcctttggt tagtttttgg cagccacat gaacaaagt 1020
gatcttgtct tcttacatct atgaaaatag agctttgaat ggtaaggaga tatgttttct 1080
tggtaaccaa tgcaagattg atgggtggaa acatgattca aacttacaca atttttcttg 1140
ctatttttca aatatgaatc ttactatata ttctcggtga acatcaggag actattaaag 1200
aggctctgctg ttaaagttaa agaaaaaatg ctctagctta tttgcttcct ggtattggag 1260
cagttcagtt gtttagttta taccattgga ttcaattcat tgcacatgg ttgccaaaag 1320
tgcctgaggt cataatggat tgttaaaata actaaattcc agtggttgga aactctaggt 1380
ttgtaccatt ttttctgctg tgggaaaaaa caacaacaac aacatgatca aggtaacatc 1440
acatttgatg tataatatta tactattaat ggaatatcag tagacaactg ttaaccatt 1500
agtagcatga gtataaacag tacacctgaa taaattggag acattagcca ctaggtttaa 1560
cagtggaatc ttgatttgcc taggtgactt ctgggattac tgtttgacaa ataagagtaa 1620
cattttattt catttcagaa tttacgtcac ctttagctac aagagtagga agaaggtaat 1680
cggcaaggca gaagagtata ctctttgcct taggatagcg taaactcagg ctgagacata 1740
cccggcttat agagttcttc tagatgtgta gactgtaaatt gcccaaatcc tctcaactaa 1800
agtttttagtg attccacaaa gcctctcatg taaatttcca gtgattccac cattgcactt 1860
gtgaatatgt atccttggtta gtaccagggt atgtcctcga gcaccagttt ttttttatct 1920
gccattgcat ctggattcca ttacagcctc tcagctgtta ctgcctgtgg acagttactt 1980
ctgcttactg cctgtagaga gttacctaac ttctcttctc agttcttcct caggctctgg 2040
ctattttggc ctgagttgaa gggagtcttg ctctcatctc tgagggtttt aagtttgttt 2100
gatcccatg ttgtcttttc tagctttgag catgtttttc agtattcata ttttaactta 2160

ctgagaacat taaagggaat tgataaactc gtggtgggga tatggcagac aggtgcttgt 2220
ttgtttgaga gaagtagcag aagagataaa atacaaagtg ctatatgttt cagctggaga 2280
ggaaagagag agaatttatt agattatata cttgtcccat ggcataccac gtatatgttt 2340
aaatagggac acatctccct atgtttaact atacttataa acaactttga tacacattgc 2400
gtcttttatt ctgtcatctg atatttttagt gtatctcaag ttacagatta catgtgtcct 2460
taaactattt ctgaatttgg acttagttcc atatacagaa agaactttag aaaattcatt 2520
aatttggatc ttctattgat agccataaat attatgttta tgtattctaa aacctctttg 2580
tttagttagt actgttcatg aatgtaacaa gcttcaatth ctcattttgtg agtagtacat 2640
ttgctttttg tttgtttgtt tgtttgtttt tgagatggag tctcacgctg tcaccaggct 2700
ggagtgcagt ggcgcgattt cagctcactg caacctccac ctcccagggtg caagtgatgc 2760
ccctgcctca gcctcccgag tagctgggac tacagacacc cgccaccaca cctggctaata 2820
ttttgtatth ttagtagaga cgggggtttca ccatgttggc taggctggtc tcaaactctt 2880
gacctcgtga tttgcccgcc tctgcctccc caaagtgtg ggattacagg cgtgagccac 2940
cacgcccagc cgtacattta ctttttaaaag cagcagacta ggtacactaa ttctcactca 3000
aatattttca tgggaatgta gttatcacca agtcctaaag tattatttat gccaaaaaaa 3060
atttcatttt aaggactaca aaaatgattc taattaaaca ttttataatc aatagtaggt 3120
tgggtcttta gccattatat gtgtatatat acagacacat atgtatacac ttacattttg 3180
acagggtctt cattgagtct tgatgcgctt taaaccagc tggctaccag agatgcgaag 3240
gtgggctctt tgaagattag caaaatggac gtttctgtca cttgagaaaa ggaaagttht 3300
ttgcctttfaa attacacagt tttcatcatg cccacaatct atattattgg ctggttaaac 3360
agcactgccc tattagcaat gttacaaaaa atgaaattat ttattggcgg ttatagatta 3420
tctaattcag gaaatttctg agctcaactt ttacagcaac tgttatgcct tctaatttag 3480
caattgagtt atgagtaagt tttgtgctta actcctagac cctattgttg ataaccagat 3540
caaatatagt ctgtacagag gaaaacactg ggaacattta gtatttctaa agcctccttt 3600
ggagttacta ctgattgtaa tttggaactg ataataggta gagattgcta acactgtttt 3660
ttttcctgga tcttttttat gccagaaatt aaacaggthc tgctaactct ttttttctc 3720
ttggttatca ccagaatgaa aatattttaa gtgatgactc tagaaaagcc atctgtgcct 3780
ggttaacatt gagtttgagt ctcttcaata tatattgatc atgtattgat taatctttat 3840
ttttcatat tttggctaga caaattcaga tctatataat ggaatacccc ttcttgagtg 3900

aactatacta ctaatctaca tgattatata gtaaggaaaa aagaagaaat aactgtaata 3960
ggcatagtgt ttgttggttg ttgtcttgtc attcatgtga tactactcat ttccaaaatt 4020
cacacaaact tacatgaggt ggattatttg ttttgttcat tatttagttc ctatatgttt 4080
tttctttaga aacagagtct cattctgtca cccaggctgg agtccaatgg ggcggtcata 4140
gttcaactgca gccttgaact ctttggtcga tgtgatcctc ccatctcagc ctcccacagc 4200
aggtgagact acaggtacat gccactgtgc ctgacttttt aatttttttg tagagacgag 4260
gtttcagttt gttgcccaag ctgatcttga actcctgggt tcaagcgatc ctcccacctc 4320
ggcctcccaa agtagtggga tttcaggcat gaccacctgg cctagttcct atacttttct 4380
taattcttca gacttctcac atttagtata gtgcattcat ttcattctgc tgtttattag 4440
caccctttgt ggccaaggga aataaaagggt ggtaaaattc agttttcagt ttagttcttg 4500
aaagctctgg gaaatggagg aaacacaaaa ctatgaatta aactagggct gttgatttct 4560
gaacccccag ataaatcagt tgaccacat tttcatttta ggtgttaggt ccaaattagc 4620
ataatgtctt gcattattat taggttcagt gtgaaacttt acagtgctgc atttgaagtt 4680
tagtaactgg ttattattaa tcatttgga aaaatgaaaa tgtgttgga ctttctatga 4740
ctaggcattt gttgattatt tttcatgatt gctttttgtt ttctcattgt gtaggatttg 4800
tgaacttgta tattacagga aacaagatac tttgtaaaat ttactgggga aaatccattt 4860
ggagtgcag acatttgcca ggataagaaa gcagtaatat gtttgattta taaaattaca 4920
ccctgccaga aaactttctt tcctagtaag gtaaattag aagggacttt tacagcatag 4980
taagttgatt aggagccaaa attttattcc agtttttttt tgaactaaga atgttttaaa 5040
ttctgtaatg aacttttatg tttaccatt actcatgcat tctttcaca tatgtttaat 5100
agcctgagga aataggaaag ctgtgaagct actaccattc tttactttta ataagaataa 5160
taggaaagaa aagtcaggtc agtaatccaa atccaaatat gtatactgca aatgctcaag 5220
aagtcacatt ttttgataaa ttgtattgag tacagaagaa cttatatgaa tttattatct 5280
gttaataact tagttttgac aacagaataa catttggaat ttgtgagaat aatcaagctg 5340
ttttccatt aacagtgtaa attcataaca tgtccttcaa aaggtgatat tctaagctgt 5400
cttaattgtc tacggttgat aactttttaa taaagtacag gactttctga aagtgtttgg 5460
catgttatgc tgccaaaaac aatctgtgtt ttgaaatacc aattaatcag ttaatttctg 5520
aagactttgt ataggacttg atatatgagt cagaatctgt ctgtactcat tctgtacatt 5580
gtaactttga acacttatga aaaactgtat ctgttggtgt gttttgatta gttagtgtag 5640

atttgtttgc gtatttgaat tccgatttta gtttaggaag actaaaagta gccatttttg 5700
taaagtcat atgctatttt ttaatgtcat ttttgttttt aatatttata caatagtgat 5760
gttactagta aaaaatgttt atagataaca cgtagagcta ttaactgttc aaaagcctac 5820
atgataggca tattttgtat ttcgtgttgc actcgttctg tttcatattg gactttttac 5880
atcccttttt tagcaaaaaa aagagacaca tttgaattct ctttagcata aagctgtgca 5940
ttggaaacta tgtgactgta tccatacggg tagcaaaata ctctttgcca ccaaaggtaa 6000
atgaaactgt aaaatacctc tggatatttg tgccaatgaa cttttcttag catattagga 6060
ttaaagcaaa aataatcttt tcagtatgtt tcatctagga cttacaataa atgttttaac 6120
catg 6124

<210> 365

<211> 3709

<212> DNA

<213> Homo sapiens

<400> 365

atctgtgggc ttccgtgcta gtctcagcac ctgggtttta tattcagcag tatctatggg 60
gagttcgaaa acatgcaggc tgccacatgt ctggaggcca tacaggcaat ccagaaagtg 120
taaagagatt ccttctcaa atttcaaggg atgtgttcca acctttcagg ctacaattca 180
ctctacaagt ttttaataaca tatttctgca tttatttttt tctggtatcc tcaatccagt 240
ttgaagggta tcagctttgc tagcgtgata catcatttgg gatttttaaaa atggtattgc 300
taatatctga gtataaattt tatttctaata attaaaaact ttccaaatta cacaaaagct 360
gtgatcctca taagttttgt ctctagaata aaattatgtg acattcctaa tgcattgcatt 420
ttgttttttg tgtatttgtt ttttaaaact agaaccctga tgatgcactg aaactatttg 480
acatagcctc atttcaaagg cagtcacata gagttctgct atctaaataa attaaagctg 540
atatcacaca acatttcagt tgggtaagct tgcaggcaat gcttgtctgg gccacatatt 600
tataatgtct aatgtcttta ttggatgttg tttatctcct tcttgaacac gatttgttcc 660
cccatcaaag tggaaacatg tcagtatgtt cacaatttta taagtgcata tactctatgt 720

gtatatgtat gtacattcac atctttacgt ctataagtag taaaatattt tttccaggag 780
tgggtgtact ttaatttcct ttgtgttttt ctatgtttca aaattatcta caatgattaa 840
ccagaaaagc aataattatc atacataaaa tagaactctt aaagaatatc tttcctaggc 900
tcgggccaag aaaaaaatat catattattt ttggccagag actaccagaa ttaagaaatt 960
aaagagaagg attttgcaga ataacctcaa aggtagtctc aaaatccaca attatactaa 1020
ctgaacacag agaaagagag agagtataca tcacctacct atgtcatgtg tttttctttt 1080
tctctttgta aaccagattg aaaaggaaga tcaggccaac cccaaagaag aagtgaccaa 1140
ggaggagttt aaactgaatg aacaacctcg gctcctggac tcattgcttc acaaccctac 1200
tacctctgga tgaagttatc tggcttcaaa tattatgcag gggcaaacac ctgctgatgt 1260
ggcaactgct gatgctcatg gtcccatgg catgggggcc tcagggcagc ctgcctggag 1320
gtgagcaggg ctatctctgt gtgttgact ccagtcaggg ggttcagca gcaccgcag 1380
gctctagagc tcaatgcaca gttctttttg tttcacctgc agtcctttct tctccaggat 1440
atgcacaggc ctccagggtc tttcatggct cagggtcagg gtggctcaag tgccaacca 1500
catgttgcc tccaaatatt cccttctatc cctggcatgc tgttgctgag ctcaactttt 1560
aatTTTTgac tttctcttt gtaattaatc tctatctggg tttctctctt tctctgtgcc 1620
atttggttcc ctttaattagt tccctgtgcc agcccatagt cagagccata attggctctg 1680
gggaagatcc aagttatttt ctgagtaaga tattaggctt ccatatgatc cagagatgca 1740
aagaaatccc tagagagtgt aggagtgtgc taaatccatg tgtcagatgt agccaacgaa 1800
ttatgtcaga agcagagaga aaaggcctga aaagcagtc tctcccactc ctcaggccct 1860
tgtctccaac cttacatgag gctttttgaa catctcctcc tggcccagct ggggtgagag 1920
caagtcctcg aaggcactgc ctttgagcct tgctcagccc atctgaacta tcccaactct 1980
agaattgact gctttcgaat tgtgtgacct tgggaatgtt atctggcttc aaccacaatg 2040
ccctacccc agctcctctc ccaaagatc ctagatacag ggctgcttcc ccccgaccct 2100
acccacctc gggacacagg ctcatggcct catggcactt caccaccaga agtggtgctc 2160
agagttccta tttccacatc taacccccta attcctggga aagtctgagg cctgggtccc 2220
ccagtgttt ccctggctgg cctctccaca ttttcatctg atggtggagt gagatcagga 2280
aaaataggac aggagctttg ccttggggga gaagagagtt aagtgtggaa aggggtgagt 2340
tataggaggt taagcagtc aagatttctc tctctgtgta ggaggccatt tctgatgtg 2400
aggggtctga acccaattat gatgggacag ggttgggcat tgacttccca tctcttctct 2460

ctgtttttct cccactatct gtagcccaaa actcttatgg aggactttga tcttttagtat 2520
aggctattgg tcagggccat aggaactaac cccgatactc actccaccag gatctaccac 2580
atccccctaca cacaacaca tgctgtgggg agggagtttt cccctgggtc aagttgagga 2640
tccttagatc accttgtgct cctgtggact ggtgtgtgcg tgtgtgtgtg tgtgtgtgtg 2700
tgtgtgtgtg tgtgtgtgtg tgtatgttgg gaaacttagc tttcagagaa tgtctatggg 2760
ctctcatttt ctctctcaca caaaaatact cgggacttct ccaagtcctt gaggagcctg 2820
accactgaag ctgatcatga gatgactgta tgctgacaca ccccttcag gggcctggcc 2880
ttgacttagg gctgcactgt atcctcagca acggccttgc aggagcccct tttggactgc 2940
tttccttatt cagcccagag ttgggggtggt gggagaagag gggttggagt gaatccatct 3000
ctattcaaat tccagctggg attactctag gagtcttcct ggcttgtttt gggctcaaac 3060
ttagctacat tgtttattgg ctcccaaagt cgggattgaa gagtgaaaag atgcaggcaa 3120
tgaatccttc tgcacactcc tcccacact ttcagcgct tttctactta ggaggccagt 3180
ggaagggagg agaggccatg ccctagccca caggggacaa ggttcattgt tcttccaggc 3240
ttggttcact ctgcttttga ttcagaagct ctttccttac ccagcaagac tacactttct 3300
tgccttcttt ctattttttc tttttgtgcg tataaatggt atgttgtgat atattctcag 3360
tgcttgtgcc caccttgga cttctgttctt gctcttcatt ccgcatgtga tactctggtc 3420
caagatcttg gccagggtgcc ttctgctcaa atatcgtctc agagggtgctt cccttgaaaa 3480
ctcgggtgctg tttccatagt tactctattt gatcactcta agtttggttg tcttcatagc 3540
acttgtcacc ctctggaact attctattca tttatttact tgtttaatgc ttggctcttt 3600
tccccctcta acgtaaactc catgattgcc aacacctgtt tacttactac agttccccct 3660
ccccccacat tctgacact agtaagaacc aataaacact tgttgacgg 3709

<210> 366

<211> 3708

<212> DNA

<213> Homo sapiens

<400> 366

actcacacac gtggcgggca gggctgcgcg gcgttccgag gagcctcgac cagaagcagc 60
aggaaaaatg cgcgcagagt tgagatgacc agcgagtagc ggaaagggga agggacggta 120
cggggaaaagg catgcgatgg gagcgggctg gcttctagtt ttccttccctt tctcctccaa 180
taactacca aggaaatctc actgagaaga cgggggaaat gaaaggaaat gggggagcag 240
tgtccacgag ccgctaaagc ctccacagga gacggagcac cgtacctgca gctagctccc 300
cgggtcccgcc cccgcgcatt ggactctgcg cctgtgcctg cggcggccag cgtgcctccg 360
ctccacgccc ttccccgagc ggcctcgcgc agggcacgtg actctccttt ctcactgtag 420
cctatccgag cactccgata tcttcagget cctcccctcc ctgctctccc tggcggcgct 480
ggccttgcgt cctcgtggtc tcagccgctc gctccgcca cgcgcgatt ggggcctgct 540
cacaaaaacc ttattgggtg acgcctgcgc accagctgcg ctttgcgctc tctactagga 600
tttttctttt ttccccagat acacagaaat agaaaagagc acagttttta aggggacatc 660
attttcacc cgttaacttt caaaggcacg taaaaacagt ggcttccaaa tgagcttctc 720
tagcagaagg cgctgcagaa agagggaaga ggggagacct agtttgcggt gctgcctgcc 780
acttctcgt tgcctagtaa cggtttccac ggcaaccgca cagtcaacga cgcttagcaa 840
tccggagaga aatagggtgt tttcttcccg agagaggact gctaagaggg ggttaaaggg 900
ggacgatgtg aaggagagaa cctgtggtcc ttcagaaggc gaagaagaaa gaaaggggaa 960
gcagtgaaga aagggacgga gatactggga cagggagaaa aaagtgtgag agagtagctt 1020
ttaaggagtc atttggtggc catggatcca acgtgctctt ctgagtgcac ttataacctc 1080
atacccagtg acttgaagga gcctccccag cctcctaggt atgtggataa gcaaagacta 1140
tcacttgaaa caagaatggg gaatactcag tattaattaa gcatacatat actggaattt 1200
ttaataataa ataaaatgta tttttgcctc gatgaagtag ccttggagga taacttgtaa 1260
gagaaaagg cgaatatct aggtattcag catctcacag ttttacagag agggcagctt 1320
ggcgtgtga gatgaccatt ttattatatt acacttaacc tcttattaat acggtatgtg 1380
attattgtgt aatttaatta tatgtgatat acagcatagt atgaagtctc atgttgaaaa 1440
gaaaaaaatc acaattctat tatcttgttt aaggatactt gatgtttggt ttcaggagtt 1500
cgggtgtgta tttctaactg cactactccc tctctaattg gataggatag gacttttccc 1560
ccaagatttt tatgaaatat aaatttacat ttgcttttga gcctcaggtt tttgatcagt 1620
gaaacgaaat atctaccact attaggcagt ttctaaggac tttttcagat ctaatggttt 1680
aaatggaagg aagaattggt ggatagataa tgaacaaaaa aatatgtaat tgagttgaaa 1740

ttttacatag gtcttagaac ctcttaaatt ctccaaatct caaaaacgtg caaaggaagc 1800
acttcagtta ctcccatctg tagggacttc ttagaactta cttaaactctg tggggagcaa 1860
agaaaagtagt ggagaaaatc tcattttctcc taggacttga aatgtttcct gtcttttacc 1920
atcatccttg tccgtatgca agtcaaaacc acatttgaaa aggactggac taaaaatcgg 1980
gcctagcaat taattgtctt tgtgaacttt agaataaagt ttcatttggt tactgatctg 2040
tgagataaat gtaccagata atatccaagg ccccttttag atctaattgg caattatttt 2100
tactagtatt agggtaatag cttcaacaag taggcagctt cttcaatttt aagtatctgg 2160
tttaaattag agcagtaact gtattacatc tccattagca tatcaacatc tagagactgg 2220
aaagaggaat gtaaagtaag ttatggcaca gttgcagaat ttattttcaa attttctatt 2280
gttgcaccaa cttttggttt caaatctctg catattacat gagataaaac tcctctataa 2340
cagattggta gattgtattt ctatagaata ttgaatttga gagttatttt attaggtagg 2400
tattctgttc tttggcaaat taaaaagctt tactgcatct agacgatttt ttttttcaa 2460
aaaaatttat aggaacagtc tttattcatt tggcaagcat taatggagcc cctattatgt 2520
gtataatatt gcactagtat atctgttctt ggtgctgttg gagtgatagc acagacttct 2580
tggttttact atgaagaaat gagtagaaga aagatttatg attagaggaa atagaggcac 2640
ccaaatgtga tgccaaaaga atcatttctg ttaggttaaa gtcaatttac actggcaaga 2700
ttctgacaac tgcctggctt ttgatctccc acgcctcaga gtttaccgtc tttttgggga 2760
actgaaatat gaacactaaa atttatcatt gaaaaccata atgagagatg aagataactaa 2820
atgagaactt agaagatgaa tgtatgtgac caaaatcgga tgaaaggcac ttttctgcag 2880
ttgaactatt ggctgagact taagttatga aagcctcaga gtcaatggga agtcatgatt 2940
cagttttcaa aatttgagtt actcatgatg cataagatgg tttccaagat tttcaccaaa 3000
tctgtcaccc tttttttttt aattactttt ttttcaagac ggagtttcac tctttttgcc 3060
caggctggag tgcaatggcg ccatcttggc tcatctgcagc ttctgcctcc tgggttcaag 3120
cgattctcct gcctcagcct cccgagtagc tgggattaca ggtccctgct accatgcctg 3180
gctaattttg tatttttagt agggatgggg tttcaccatg gtggccaggc tgggtcttgac 3240
ctctgacct ccagtaatcc acccacctct gcctcccaa gtgctatgat tataggcgtg 3300
agccaccacg cctggcctat caccctttat tgatgtctgc agttattgaa tatctccagt 3360
catccccctt ttccattttg tttaaagcaa tattccagtt atggtctgaa cagtccatga 3420
aaccattatc tcctttccat aattcttggc acaatatatt catccattca gcctaagctt 3480

ccataagcat tttagacagtc atgtccaact attggctcac actaaaatac cctgtatgga 3540
ttttgactaa ggtaggtctc tcccatcctc taattatgta gctgattctt ttttatctca 3600
actcattaat ctatggagat agttttgcat ttgaatcttt tatacattct gttaaccatt 3660
ctttttgtgt catttgcaaa ttttaataaat atgtctttta tatctctt 3708

<210> 367

<211> 3724

<212> DNA

<213> Homo sapiens

<400> 367

aaagaaacta taaatgcctc ccataacct tcttagggca aggctgccac agcgtcccac 60
atggccccac atgcagcctt accagcttcc tcgggccgcc catgtgccat gggtgacagt 120
gggtgtctca ggaaggcctc ccacccatgg ctgcacagct agaacctccc ccagcacatg 180
gggacgtgct tccagcccgt ctttcaagaa tagaaaacac atctcatggc agaagggcag 240
acggtggggc gcagtgaggc tgagcagtgt gtatggagag gaggtccact ggcctcgcct 300
ggcctcagtc cccgccctcc ctctcatcgg ctcatctctc accctggtgt ccttaaaagt 360
cacactggct ttggagggtt gtcgtggggc cgagatgggg cgatgtgtgt ggaagagccg 420
agccgacatc caagccgagg cctggcctgg gagcctcagg acccgggagg tctcctttct 480
ggctccagac gctggtgacc aatggccact gctcaccttc cctggggagt tttacaaaa 540
ctgtggcttg agtgcttgtc acaaattctc taaaggcctt cgtttctgga ctgacatttc 600
agtgttttca gctgtcattt ctgggaaaca aaatggtttg gcctcaccat cctgttaata 660
ggatccgttt tcatgacaga ttactcctgt tctcaccggc gactcccat tgctagacag 720
gcagctgac ttcctacaga tttctgtttt gcaaagagag cagcataggc cgggtgttgag 780
agaggtgggg gccagaccac ctacgtccaa tcctggcttc tccactctgg agctgtggga 840
ccttgggaac gtttcatgct ttctctgtcc tgagtttctt cgtgtatcaa atgggtacac 900
taaggccccac ttcacagaga gtcataagga ttaaagttagt tgttagaagg cattgagccc 960
ctggcacttg gcagtgctgg gtaagtgttt ttttagtatg aacagtagtt tcagaggagg 1020

aagtcttctg agtccaacac tgagcactca gtgtgtcacc tcctgcccag cctgtggtta 1080
catgatctcg gtgagtcttc ccgtggccca ttctacaggt gaggaacta cagctccgag 1140
aagcatgagc tacttgccctt ccttcagcag ataccgcagg atgcctgctg cacctggcac 1200
tgccggcagc cgggccacgc catccccgc aacaggcggg tttggaccct tgactgtgcc 1260
gctctaccac cggttccct ctttaagatgg agacaccctg taccctactc gcatcttccc 1320
aacagagctt tacaaaatcc cctccttgt ctagtcacgc ctttagaggca cggccctgag 1380
atcccgatga cacattcata acaggtgaca ggtccgacat gtttacttct tactagccca 1440
aagaggtctt caaagcaaat cgcatacata cagtcacccg ctccctgcctc tttagggctg 1500
accagggtcg cctcctggac tgcgtggtgc gatggggaag cctcactgaa gggaagatca 1560
gggcgcacct gggggaggtt ctggaagctg tccggtacct gcacaactgc aggatagcac 1620
acctggacct aaaggttgggtagggccccgg gcaggtgaag ggggggtctga gcacaccggc 1680
ttggccatgc gggacacaga gccccctctg aagccaggcc aggagcccc aagtgactag 1740
ggacaaaaag ggtgggtggg gcagcgcaga cactgattgc taatctctct ctctctaagc 1800
gtttgcgttc agtgatgcac acggtcagga gcacactggg taaaacgccg gagccctccc 1860
agccttccac gactttcaga aagtcccat gagttttgcc cgggtgggtgt ggcgggtgca 1920
gtggtagctt aggcgggaaa gagagcattc cccttgggtgc tgggaggga aatgaacacc 1980
cagcttcata aagcagcctg gtttcattag gctacttggc acttagatct ccaaagagag 2040
ctgccctgtg tggatctggg tcccagctcc gctgtgtcat ctcttctcc tcaccctcgg 2100
ctgccagctg agtgggtccg cctgctttgc acatgcatgg cttgtcctag ttgacatcct 2160
agattccttc cacctacca tagagtcccg cccatcatca cgagtaagct taagattgga 2220
tggtctgaaa atgacagttg tattctgatt tccagcctga gaatatcctg gtggatgaga 2280
gttttagcaa gccaaccatc aaactggctg actttggaga tgctgttcag ctcaacacga 2340
cctactacat ccaccagtta ctggggaacc ctgaattcgc agcccctgaa atcatcctcg 2400
ggaaccctgt ctccctgacc tcggatacgt ggagtgttgg agtgctcaca tacgtacttc 2460
ttagtggcgt gtcccccttc ctggatgaca gtgtggaaga gacctgcctg aacatttgcc 2520
gcttagactt tagcttccca gatgactact ttaaaggagt gagccagaag gccaaaggagt 2580
tcgtgtgctt cctcctgcag gaggaccccg ccaagcgtcc ctcggtgcg ctggccctcc 2640
aggagcagtg gctgcaggcc ggcaacggca gaagcacggg cgtcctcgac acgtccagac 2700
tgacttcctt cattgagcgg cgcaaacc agaattgatgt tcgacctatc cgtagcatta 2760

aaaactttct gcagagcagg cttctgccta gagtttgacc tatccagaag ttctttctca 2820
 ttctctttca cctgccaatc agctgttaat ctgaattttc aagagaaaac aagcaaacat 2880
 aactgatcag ctgccggtat gttcatcgtg tgaaattgca ttccaagtga gctgtgtctca 2940
 gcagtgcctg gacacagagc tgcaagctgc gctgggggtgg aggaccgtca cttacactct 3000
 gcccaaggca gaggtcgc at tgctgtatca cagtatttta ttcaggtttc tgcaaaaaaa 3060
 taaaaagata acttttttaa acaaacatga atagaatttt gcaaatttaa cgttttcaag 3120
 atttattcaa ggaaacaaaa tgcctatgtt caaccactgg tgttaatgaa caaagatact 3180
 gtgcgtctct ggggaagacg cacctaggtg gcggccactc ccatggcctt gtctagggtc 3240
 cagagaccac tcggctctga gcttccaggc gcctcgtctg tgtgcatctc acgcccgcacg 3300
 tggcttctga aacgtgcatt caacctcaaa cttttgcata aaatagaatg aatcgttttg 3360
 ctctgatgaa atgtaggcct tacttgtata taagactgtt cctgccttcg gtctgtcatt 3420
 tccccacctg cctcccctac ccacccccca cccaccacct ggggcttctt ctgggggtcc 3480
 gagggctctc ccatacatg aagacatcag gttgggtcct gccccactgc ccctcccct 3540
 gttcctgccc caagccgtca atcagattgt ggagcagtac acagtcagat gaaaatactg 3600
 taaatgcact cattgggggt tttttggttt tacttcatat catgtacaat gttgtggctt 3660
 taacatttta tgcaactatt tatgaagacc tctgttgtac ctgtaataaa tatatagaaa 3720
 aagc 3724

<210> 368

<211> 3866

<212> DNA

<213> Homo sapiens

<400> 368

tgcactccag cctgggtgac agagccagac cgtctctaaa aataataata gcaataacaa 60
 aataaaaaata aatgtactgc acccaactat gaccaggag tggcatgggt ttccgcagcg 120
 cagcggccgc gcctgggcgc cccaagcaac acaaccagcg ctgtcaggag gcgaatagga 180
 gccaggacag agagctgggg aggccactgc tgtcaggcga gggataagaa ggccgtccgc 240

ggcgtcactg acggggctga aggaacacca ggagaagagt ggcagacagc tccggagccg 300
cgctgcccgg gcgacgccgg aagatgggcc tcccagcggg cttcctttca gccaatggcc 360
gcgagatgcg ccgtccgagg gtgccccgcg cggcacaggg agggaacaag cagcccatcg 420
ggtgcaagaa agcactatct ttctaggtga ctatgcgaac taccaggga gtgtagctag 480
ggacaggctt ctctgcccgc ggttaaccta actcagtgcc accacgcctt taacctgaag 540
ccaggagca cggctgccct cagtaaagat ggctgactgg cgcggagaaa aagccggaag 600
cagctgggct ttgcaggag cgcactgagc gctgcggggg cgtggcctgg cggaggagg 660
gcgtggccag ccgccgtaac ctgggtttgc gatctttgag gcgcccgcac cgcacccggt 720
cccactctg tggttctctg ggggcgggtt cgcgcctggc cccgcccccg cccaggtgtc 780
tccctttggg aagctgcccg ccgagtctcc gagatttgtc cctggtggtc ccgcggaccc 840
ctcgtccctc cgcagtctcc ggctggcagc gatggagggc gctggggaga acgccccgga 900
gtccagctcc tctgcccctg ggtccgaaga gtctgccagg gatccacagg tgccgcctcc 960
ggaggaagaa tcgggggact gcgcccggtc cctggaggcg gtccccaaga aactctgtgg 1020
gtatttaagt aagttcggcg gcaaagggcc catccggggc tggaaatccc gctggttctt 1080
ctacgacgaa aggaaatgtc agctgtatta ctcgcggacc gctcaggatg ccaatccctt 1140
ggacagcatc gacctctcca gtgcagtgtt tgactgtaag gcggacgctg aggaggggat 1200
cttcgaaatc aagactccca gccgggttat taccctgaag ggcaagaaga ggcagagctg 1260
gaggagtcc tgtgccctgt gaaaacaccc cctgggctag tgggcgtggc agctgccttg 1320
cagcccttcc ctgcccttca gaatatttcc ctcaagcacc tggggactga aatacagaac 1380
acaatgcaca acatccgtgg caacaagcag gcccaggga caggccatga acctccaggg 1440
gaagattcta cacagagtgg ggagcctcag agggaggagc agccctcggc ctctgacgcc 1500
agcaccacag tgagagagcc agaggattct ccaaagcctg cacccaagcc ttctctgacc 1560
atcagtttcg ctcagaaagc caagcgccag aacaacacct tccattctt ttctgaagga 1620
atcacacgga accgaactgc ccaggagaaa gtggcagcct tggagcaaca ggttctgatg 1680
ctcaccaagg agttaaagtc tcagaaggag ctagtgaaga tcctgcacaa ggcactggag 1740
gccgcccagc aggagaagcg ggcgtccagc gcatacctgg cggcggctga ggacaaggac 1800
cggctggagc tgggtcggca caaagtgcgg cagatcgagg agctgggccc gcgggtggag 1860
gccctggagc aggagcggga gagcctggcg cacacagcga gcctgcggga gcagcaggtg 1920
caggagctac agcagcacgt gcagctgctt atggacaaga accacgcaa gcagcaggtc 1980

atctgcaagc tctctgagaa ggtcaccag gacttcacgc acccccctga ccagtctcct 2040
ttgcgccccg acgtgccaa cagggacttc ctgagccagc aggggaagat agagcacctg 2100
aaggatgaca tggaagctta ccggaccag aactgcttcc tcaactccga gatccaccag 2160
gtcacaaaga tctggagaaa ggtggctgag aaggagaagg cccttctgac gaagtgcgcc 2220
tacctccaag ccagaaactg ccaggtggaa agcaagtacc tggccgtct gagaaggctg 2280
caggaggccc tgggggacga agccagcgag tgctcagagc tgctgaggca gcttgtccag 2340
gaggcactgc agtgggaagc tggggaggcc tcatctgaca gcatcgagct gagccccatc 2400
agtaagtatg atgagtacgg cttcctgacg gtgcccact atgaggtgga agacctgaag 2460
ctgctggcca agatccaggc gttggagtca cgatcccacc acctgctggg cctcgaggct 2520
gtggatcggc cgctgaggga gcgctgggct gccctgggcg atcttgtgcc ctcagccgag 2580
ctcaagcagc tactgcgggc aggagtacc cgtgaacacc ggcctcgtgc ctggaggtgg 2640
ctggtccacc tccgtgtcca gcacctgcac actccaggct gctaccagga actgctgagc 2700
cggggccagg cccgcgagca ccctgctgcc cgccagattg agctggacct gaaccggacc 2760
ttccccaaca acaaactt cacctgcccc acctccagct tccccgaaa gtcgcccg 2820
gtgctgctgg ctttctctg gcagaacccc accatcggct actgccaggg cctgaacagg 2880
ctggcggcca ttgccctgct ggtcctggag gaggaggaga gcgccttctg gtgcctggtg 2940
gccattgtgg agaccatcat gcccgctgat tactactgca acacgtgac ggcattccag 3000
gtggaccagc ggggtgtcca ggacctgctc tcggagaagc tgcccaggct gatggcccat 3060
ctggggcagc accacgtgga tctctccctc gtcaccttca actggttctt cgtggtcttt 3120
gcggacagtc tcattagcaa catcctcctt cgggtctggg atgccttctt gtacgagggg 3180
acgaaggtgg tgtttcgcta tgccttggcc attttcaagt acaacgagaa ggagatcttg 3240
aggctacaga atggcctgga aatctaccag tacctgcgct tcttcaccaa gaccatctcc 3300
aacagccgga agctgatgaa catcgccttc aatgacatga accccttccg catgaaacag 3360
ctgcggcagc tgcgcatggt ccaccgggag cggctggagg ctgagctgcg ggagctggag 3420
cagcttaagg cagagtacct ggagaggcgg gcatcccggc gcagagctgt gtccgagggc 3480
tgtgccagcg aggacgaggt ggagggggaa gcctgacttg gccacctccc ctccccacag 3540
ccttctcac ccttggctgg cagaccact ggaggtcagg cacggaccag tggcccagcc 3600
ctgggtgtcc catcaccatg tgaccttga catgtccctt cccctctctg gccctcagtt 3660
tccccactgg gacattgtgt gctgcaaagc cattggttgg gctacttctt cataggcact 3720

tacttaccca gggatgccac cctttcgtca cctcttccac agagcacttt ggcatgtaaa 3780
caagcaagag cactgcctct atagggtaac ctggaacatt ctctaggtta tatcaatata 3840
aaacaatgta aatggtggaa atcatt 3866

<210> 369

<211> 3581

<212> DNA

<213> Homo sapiens

<400> 369

gtctctgtct ctctctctcc ctctctctgc tccgggcgga gcccggcatg ggggggcccgg 60
cgcccggcag gccagtggat ccgggaccca gggaggggccg cccccgggc ctggtggcac 120
tgagcagggc cccccagccc ccacctctg cccacgaga tgaacctct ctaccgaaaa 180
accaagctgg agtggaggca gcacaaggaa gaggaggcca agaggagctc cagtaaggag 240
gtggcccccg ctggctcggc tgggcccgcg gccggccagg ggcctggggg cgcgtgcgg 300
gacatcgctt cgctgcggcg ctccctcagg atgggtttca tgacgatgcc cgcctcccag 360
gagcacaccc cgcacccctg ccgcagcgcc atggccccac gctccctctc ctgccactcg 420
gtgggcagca tggacagtgt cgggggtggc cctggcgggg ccagtggggg cctcacagag 480
gacagcagca cccgaagacc ccctgccaaag ccccgagac accccagcac caagctcagc 540
atggtggggc ctgggtctgg ggcagagacg cccccagca agaaagcagg ctcacagaag 600
ccaaccccag agggccgaga gtccagccgg aaggttcctc cgcagaagcc caggcgaagc 660
cctaacaccc agctctctgt ctctctcgat gagtctgcc cccaggccc ctctctctga 720
ggggggaacc tgcctcttca gcgcctcact aggggggtccc gagtagctgg ggaccctgat 780
gtgggtgccc aggaagagcc tgtgtacatt gagatggtgg gggacgtctt taggggagga 840
ggacgaagtg gaggaggcct ggctgggccc cctcttgggg gtggggggccc gaccctcca 900
gcgggcgccc actcggactc tgaagagagt gaggccatct atgaagagat gaagtacccg 960
ctgccggaag aggctgggga aggccgggcc aatggccctc caccattgac ggcaacatcc 1020
ccgccacaac agcctcacgc ccttccgccc catgcccacc gccgcccagc ttcagccctc 1080

ccgagccgga gggacgggac gcccaccaag accactcctt gtgaaatccc cccgcccttc 1140
cccaacctcc ttcagcaccg gcctccactc ctggccttcc cccaagccaa gtctgtcttc 1200
cgaacccctg gcgatggggt ctcaaggcta cctgtcctct gccactccaa ggagccagcc 1260
ggctccaccc cagctcccca agtgcctgca cgggagcggg agacgcctcc cccaccgcct 1320
ccacctcctg ctgccaacct gctgctgctg ggaccatcgg gccgggcccg gagccactcg 1380
acaccgttgc caccacaggg ctctggccag ccccgggggg agcgggagct ccccaactcc 1440
cacagcatga tctgccctaa ggcggcgggg gcgccggcag ccccccctgc cccggccgcc 1500
ttgtccccg gccccccaa ggacaaggcc gtgtcttaca ccatggtgta ctcggcggtc 1560
aaggtgacca cgcactctgt cctgccagct ggtccacccc tgggtgctgg ggagccaaag 1620
acggagaagg agatctcggt cctccatggg atgctgtgta ccagctcaag gccccctgtg 1680
ccagggaaga ccagcccca cggtggggcc atgggcgcag cagctggggt cctccaccac 1740
cgcggtgcc tggcctcccc ccacagcctt ccggacccaa ctgtaggccc cctgacccccg 1800
ctgtggacct acccagccac agcagctggg ctcaagagac cccctgccta tgagagcctc 1860
aaggctgggg ggggtgctgaa taagggtgt ggtgtggggg ccccatcccc catggtcaag 1920
atccagctgc aggagcaagg gaccgatggg ggtgcttttg ccagcatctc ctgtgcccac 1980
gtcatcgcca gcgcaggac accagaggag gaagaagagg aggtgggcgc cgcgacattt 2040
ggggcaggct gggccctgca gaggaaggct ctctatggag ggagaaaagc aaaggagtgtg 2100
gacaaggctg aggacggtgc ccgggcctgg aatggcagtg ccgagggtcc aggcaagggtg 2160
gagcgtgagg acaggggccc tgggacatcg gggatcccag tgagaagcca gggggcagag 2220
ggactgctgg ccaggatcca ccatggagac cgaggaggga gccgcaccgc gctgcccatt 2280
ccctgccaga cttccccgc ctgccaccgc aatggagact tcacgggagg ctaccgcctg 2340
gggcgctccg cctccacctc cggagtccgg caggtcgtgc tccacacacc ccggccctgc 2400
agccagccca gggatgcct gagccagccc caccgcgc tgccgctgcc tctgcccctg 2460
ccgccccagc cggcccgca gcgtgacggg aagctgctgg aggtgatcga gcgcaagcgc 2520
tgctgtgca aggagatcaa ggcgcgccac cgcccggacc gaggcctctg caagcaggag 2580
agcatgcccc tctccccag ctggcgccgg ggacccgagc cccgcaagtc cggcaccgcc 2640
ccctgccgc ggcagcacac ggtcctctgg gacaccgcca tctgaggcgg gcgggggggt 2700
accggggcgc ctggacttgg gagggggcgg gcacgcctgg ctctccggg agcctgcct 2760
tgagagacat tgaaagacta cgtgagagag tgccaggag aaccctgcc ctccaaccta 2820

ccccccggga tggggagagt ctgccaggcc cattgggctt aggatgccaa cagcgctgct 2880
gagaaacgga ggaggaggag ggtttgcttg aggttggggc gagagtcgct ctggctgttc 2940
ttcccgtgg gcgctgtaca cccctcctcc tgaaccaagc cagaggtcag catggggaag 3000
ggaggaagga agggatggga ggaagagggg ggtgggtgag ctgaaagaga gggactagag 3060
tgccagatgg aggagctctt ttctagagag ccgggagttg gggagggggg atttattttg 3120
ttattttatt cagtctggag ggcgattctg ggcccttctg acctactcct gagctaggag 3180
tgagaaatca gggccaagt tgcactctcc ccaatgccaa tgcctaaagg ccccgccgtc 3240
catgccaccc cacagccaag gaggggtctg catggggagt ggaccgagag aagaaggggc 3300
ccaggaagc agagggccca agaccattca cagtatttac aatttgccag aatttggtag 3360
tcagtgtggc ctgctctgaa tcaggcatct tatttagttc tggggtgagg gtctagtgcc 3420
agggatgggc aggatgatgg gggaggagga gggaaatatt agcgggtggg gggggtgggc 3480
agggtattta tttaaattaa aaaacaaaac agaagagatg tcaggaactt ttttttaatt 3540
cctttctttt cagaataata tattaaaaga ctcatgatcc t 3581

<210> 370

<211> 3842

<212> DNA

<213> Homo sapiens

<400> 370

ctagttactc tgatgaagag gaaagagtgt taggcacttg agctcttggt tacagggaga 60
caacttactg gcttttataa ctgacggtag ggaaaaacag ttcttttgta agcatccttt 120
ataattctcg agctgtgaca ggagtacagc ctccctcacct gcctgaagcc aaaggagaag 180
gtggttctcc tgagagctgg gggcttgcc tcttcggttc tctcctgagg gtggctggta 240
agtctgggtg taccctagtg tggctcatg gccacttggc ctcccttcct gtatgtgacc 300
acaaaggagc tcagaattag agagactgta gattaccac tgctggctgc taacatgggc 360
ctaagagtcg gtggggaagg gagccaggcg cagtggctca catctataat ctcagcactt 420
tgggaggctg aggcgggtgg atcacaagga tcaggagttc aagaccaacc tggccaacat 480

ggtgaaaccc catctgtact aaaaatacaa aaattaggtg ggcatggtac cacgcgcctg 540
taatcccagc tactcgggag gctgaggcag agaatcactt gaacccggga ggcggagctt 600
gcagtgagcc gagatcgcgc cactgcactc cagcctgggc aacagagcga gactccatct 660
cagaaaaaaaa ggaactggag ggagggaccc tcagacatcc tgtccacaag gctgtcaagg 720
gggttttctgg cctggcattc ctccctagat ctgacctacg ctctccctgc agcatttctt 780
gccctctgac agggcctctg ctggactgcc aggttcccgt gtggtttggg ggagaagatt 840
ttgggggtggg tagagtaagt agttggctct cagggatttt gtctaagaga aagtgagatg 900
ggagaaatcg ggactgacct ggtcgtaact gaaggtaagc tgtttgcagc atcccccttc 960
ctgggtgcaa attcaggtat cataagtcta acatggaatc ggtctgctct catatgtggc 1020
ctggagataa gggatttga ggtctcttgg caggaaggcc tcattcacat ctgaggggtg 1080
gagagcgcgc aggcagcagg cagttgttcc caggtttgtc acaggccaaa tggtaacttt 1140
catttggccc ttgttgcccc tgccccctct tcctccattg ttagccatgt gctgtagctg 1200
aagccccaac ggacctttca ggaagcttgt ggaccatgga aaggccaaa aggaaaagcc 1260
aaaaacaatc aatggggcag actgagttag accgagtccc aggtctgtgt tcctgcctcc 1320
tccagtttcc accttctgac ccctagacct cctctcccct ccagagtgtt ccaaactggc 1380
aagctgggtc tggccttcct tgccctgggt gtacataaga gccaccatgg ttgtttagg 1440
cccagtgagg aaaagtggac ttgctgggac atcaagcccc accggactgc tccagcctgc 1500
tgaggccaca tcaggagat cctgctgcct gtcctttcgt tccatctgct ttactggagc 1560
cctggagccc tttggacagt gtatttattg acaccaccta cattttcaaa gagactcatt 1620
taaagtgaca gtggaaaatc catgtccatt tacttggaca gtggaaaatc catgtactga 1680
acccaccct caactccaa actctgcgtt ggtgcatttg cacttctaatt tttgagggcc 1740
tggtaatgac gccaaaacca agggttgggt ctctgtgagg ccaagcagtt ttgttctgtg 1800
ccaagatggc agcccctacc cctcagccca gccctgaggc ccgtctccag cccccaaaa 1860
tccttgcctg gagggctagt cagtctctag atggccagtg ctgagccttt agtagaactc 1920
ccaagtaccg ccgcagccga gagcctgtcc ttaactgcac agtgattctt ctgccggggg 1980
tcaaagcaca aacctgggag gcagaaaccc tggagtcct tctgttacac tacatggccc 2040
tgaatatcaa gtccagattc cactgccctt ttctggctat tgggtgggag ggtgctgggg 2100
aagggcactg gcacctactc accccaagt gggcagagct cactccttcg ggcccacttg 2160
gtgttgcagt caagagactc agttccaaaa accttcagca gaggtcttcc ctctcctgg 2220

tatttactg gttgctctcc agaagtcctc ttcagaggaa tgcttatcac acatgcttat 2280
tctccgtttt cccacttcaa cagttacttc aggttttaaag tcctttttat ctctgtaacc 2340
tggtgacata aagccaggaa cattttccca caatccacct tagcataaaa cataacaatt 2400
tcattcatca gttgttattg tgtagaacca atgaacatgt tggtcatttg tctgtattta 2460
gtctttattt gtattgctat atttgagcat tccaagattg cagagcatga gcgtgtgtat 2520
ttgtgtgatt ctttaatttc agctgcctta ggtttgagta aaagatgtaa agaaagggat 2580
atctgcatta cctccacctc ctccacctcc accaccacca gcagctccct tgcctcctgc 2640
gagcaccgag gtacctgcc agctctcgtc tcaggctgtg aatggcatga gccgaggggc 2700
cttgctcagc tccatccaga atttccaaaa aggaactttg aggaaagcca aaacctgtga 2760
tcacagtgtc ccgaagatcg gctgaagctt cctgtttaca cttggaggga aaagttcttt 2820
tttattccta ctcacccta cccccaaac taccctcttc ctgggaaagt aattgctgag 2880
ccagtacagc cacaacagt actattttgc agatgtcat gtaagcagct tttcgagaga 2940
aataattctt taagcagaat aaagttaggc tggcattgct cccttaagat cttgctcctt 3000
tattaaccct gtaaaggagt cttgtttatc ctctaattggc caggcttttg ggacagcagc 3060
atattgaaat attttacca actaaaggaa atagacagaa aaacaatgac aatattcaat 3120
cacagcagta aatggccttt gtgttgcaat cccttctacc ccatcagaca gctcctagaa 3180
acattcctta cagttcattt ctctaaagca ttttctgatt cttagataac tccaattttt 3240
gtacacctta tcttagacat taacactata gccc aaagca tagttacttt gctaaatcag 3300
aaagcaactg agttctttgt tttctctca aatagaatgg ggaacgttca caacattctc 3360
ttaagttcta acaggaatac cattgtggtt atagaactca gggctgctaa agcaactact 3420
ctagacccat agttcttttt agttagatgt attgaaacag acaaaaatat taacatcaga 3480
aaaagctctt gccaattaga ggatcttctt aatcctcagc aattaagttt ggggtttgag 3540
gggggcaggt cattgttaca acagaagtaa atttggcatc tatagaaatc aattatgatt 3600
tttgaaagat ttatctaaat atatcaatat agcatctctt taatgttagt catttattag 3660
aaagatcctt tctctgatt tgcttaaacc tttcaataaa ttgcacttta aaggattata 3720
aataatccat ttaaaaattc aagtacacac atcagtgtg gttactatgc agagaatgtc 3780
attgtgtata gtttcatgta atctgttatg tcagctgtat tttttattaa aatcatgtca 3840
ag 3842

<210> 371

<211> 3638

<212> DNA

<213> Homo sapiens

<400> 371

aagcttttcgg	ggagatggtg	gaaatgaacg	gtttcttccc	ttcagaactg	gctacagaac	60
ccagtgcggg	accagtgagg	gaccttgctc	aaagaccatg	aagagtctca	aggcactgac	120
agcacagcat	gaaccaagc	ggggcccttc	aaggcaacgg	acgaccgcag	ggtcagaccc	180
taccaagcc	ggacttgcca	ctggcccaga	ggccccagga	aggaaccccc	tcgtggatgc	240
ctcctaagct	gtccctgggc	tctgagactc	tgggctcagg	ccttggctct	gctcctatgt	300
cagattcgca	gtgaggtgtc	acgcgtctcc	ctgggggtggc	acggggacaa	cagctgtgct	360
ccacctgtga	gcactttaca	acacgactgg	gcaggccagg	gcagacgctg	gcctcgctcc	420
ttccccggaca	gctgcggggg	agaacgcccc	tgtgtggtgc	aggctgctgc	gggggagaag	480
accccccaaga	ctcctcacct	ccaccccctg	cacgtgggag	ccaggtcccc	aggcaggggc	540
gacgggctgc	cagctgcccc	gtgtgagcag	cctgcctgc	ccactttgga	gccagaggaa	600
cagcaagcag	gctccaggcc	acggccctcc	cggctctggt	tccctctgct	tgctcccttg	660
agggggcccat	acggggcctg	atgcccagga	gcctgcggcc	cccttgtcct	ggatctactc	720
tgcgctggct	tccaggaggg	aggaccccct	tccccacca	cgtctcatgc	cagcctcggc	780
gcagctccgg	agagcgggag	gcggaggctc	agagcgggtc	agccccaccg	ggccccagcc	840
cgttgccctc	gccccacct	caccccatcc	ccagcagcac	cacttccgct	caggcctggc	900
tgctggcaaa	atctcggcac	agagggagga	gggggagagg	aaaacgcatg	attcctctc	960
aaaatggagt	cagccgaaaa	aagcgtgaat	gcagagcccc	aagagactcc	tgggggaggg	1020
gagccccctg	agggccagcc	gagggccggc	gcaatggctt	atctgaggga	caggcagaag	1080
gacggacccc	cacggtggac	cccagctacg	caccgtgtcg	tggtggggcg	ggaaggcgaa	1140
ggtgtactcg	tctgccagca	gcctgcggta	ggcgtagtcc	tcgtgcgcgc	ggctcccgtg	1200
agccccgtag	tagtcgtact	cgaggacctg	ggaagaaaag	acgtggctcc	cagcctgcct	1260
ctttggcccc	tccccgcttc	cctccccaga	gcgggggtccc	gctgaggctg	tgatggggtc	1320

aggcctggcc ctgccctcgg agagccctgc actgagtgcc cgtgtgttgt ggacgcgggc 1380
agggggctcc catgaggtcc aggcaaaaca gaggcacaaa ggaggccgca gggttgcctg 1440
gtgggtctga gagcccagcc agggcccagg aggctggagg aggagctgga tgcacccaag 1500
gtggggaacg acagggagag gtggttaccc aggacctcag ccagggtgc tccctggagc 1560
cacggcaatc ccaggcccag ctctgtctct gggccagccc ctgcgggaag cgtcttacac 1620
tcctaccagg tgtgccctt tctacagatg aggaaagtga ggcgcagaga agttatatct 1680
cgcccaaggg cacagacaag tcctggacct ggcaagtggca cgaagccagg caggtgcgtg 1740
ggctccagag tccagctttt ctgccactgc cttggcctcc ctgggatctg ccccatcag 1800
acaccccaca gcccacagc cccatgcccc tcctggccg ctgctcctgc agacaacccc 1860
ccaccccgcc acctgccctc ctaactgccg acacggcaca gctgtgaatg caggtgcggg 1920
caattcttaa cctcccaggg ccgccagccc cgcccgcca agcctcacct cctcttcaca 1980
cacaagtggg agccagtgtg aggttghtaag ggagtcaggc tttgctggca tctctgcatg 2040
gagtaccccc ctcccagca gggacatccc acccactgca gccctgcca ggtgtcctgg 2100
acaccaggc tggctcccgg gtgggggtgc aaaatctgcc catcttggga cctggggtgt 2160
gttcctgact ctctctct ctcccaggga caggggagag gggcttcag ggccagatct 2220
gactggaaca cagtgggttg cacttcaaga cagggtctgc ccagaccct cctcccgcga 2280
gggttcatga ggacggcatg tccttagggg ccagcaggag aagagacgat gacctgcaag 2340
gccctgacct cagagccgtg gcccgttag ccagctctgg ctctcatctc cctcccgat 2400
gccctggagc tctggagcct ggcctgggct gtgggttgcc atggggatgg aaggtgggtg 2460
caccagaggg gactggtgag acgcagcccc gggaagggga tttggatttc tgtaaactctg 2520
gatcaaatgc taccctcag ctggccttaa ggcctcgcgt ccctgtctc cgagggtctg 2580
ggtcccaggt ttcacagcag gactgccttt gttcctctca ctgaggacct aggtccctgg 2640
gagtccccag aggacgcca gagtccaggc cactgtgaaa cctccactgg gaaactgagc 2700
accctgggtg catcaacctg ccagtgctt gccctcctac ggacataaac caacagtcgg 2760
agtggccaaa aatagatgca cagaattagg agacgtcca ttcctcctgc aacctggggg 2820
agtcttcttg ctgtctcccc accgcaggac accccttctg ctctgcctac agcccttccc 2880
acttaggcca tggaaggcct ggccacagcg gacgggtagt ggggaggacg aggagtggga 2940
attgcgtgaa cggcacaaag aatgcactga gccttggggg caagtcggca gggctcggct 3000
tcccgtgtgc agaataactg atcacgacag tggaaccacc tggggaggcg gggcacacgg 3060

aggggcaagg acggggcaca cggaggggca agggggttgt cagggcaggg cctcccagca 3120
 gcacagccca gcaggcacta ctcaccggag ctgggcctcg gggatgaaac catcccggtc 3180
 gctcccagcc atgccgctcc tggaacacgc agccttgtcc aaggagtcc tgagcaggag 3240
 tggggaacag gcatctgtca cgcattggcct gatacccctg cgcagggcag agagccacat 3300
 ccgccacttt acaccaagg gtgcggagag caaggaggcc ctgactcttg gaaccaggcc 3360
 tccagcccag tgtttgcagc taccctcact gcctcaccct gagaaccct atgtgtagaa 3420
 ttaccacctg ccccatctgc cctcaccctg agaaccccca tctatagaat taccacctgc 3480
 cccatctgcc ctcaccctga gaaccccat ctatagaatt accacctgcc ccatctgccc 3540
 tcaccctgag aacccccatc tatagaatta ccacctgccc tgatctgccc ttaccacact 3600
 actcctacct atctcccctt ttataactaat aatcttat 3638

<210> 372

<211> 3681

<212> DNA

<213> Homo sapiens

<400> 372

gtaattgctg cggggaggac aggccagctc tggaagaaaa caggtggacc tgggtcccat 60
 taacctggac agacacctcc aagatgagca tgagggggct gctggatctg ttctcctttc 120
 acagctgtat cctgaagaat ggcagtgagc cggaagagcc acaggattcg gcaaagacgg 180
 acacacaggg atgggtttctc actacgttgc ccaggctggt ctggaactcc tagactcaag 240
 cggtcctccc acctcggcct cccagagcac tgggattaca gacatgagcc accgcacccg 300
 gtcaggtgca gccgttgggg actgcaaagc tgttgatgca gaaggcctag tgcctgggga 360
 tgcccacatt gctgggtgtct gccacattca ggatgcctga ggtccgggag ccaggaaggg 420
 tgaagtagtc cctctgtcgg ccgctgttga agcctgcctg ggggtgtcat ttggaacagg 480
 gtcagccac ctgcgtcctc accctcccca aggaccagg gaggcccctg tgggttcccc 540
 actcacctgg gccgcaatgc cccccaggcc gtggtggggg ctcccaccgc tggccacccc 600
 catggtccac tggatgtcct tgtggtgaaa cagcaccag gaggggccgc tgcccagggc 660

cagcacctcc tggaaggtgt tcacctgcag ggcaagcgcc aggagccagg gtgtcgtggg 720
ctggtccagg ggcacccagg accctcctca ctgcccagtc ctcaaccgag ctccatctgc 780
accactaagc tggctgcttc cagctgtgcc acctcctggg ccccatcca caccacatcc 840
cgggccccta cccatgccac atcccagacc cccatccacg ccacctcca ggcccctgtc 900
cacaccatgt ccacagctgc ctctgctggc acctgtgcca gccttccttt cacatcccc 960
agtctcgatt tttctgctct gctctcatcc cctctctctc tccgtctctc tccttttctt 1020
attctctgtc tctccatctg atcatctcac tcctctcgct tgetgtcttg cctcctctct 1080
ctcgccattt ctctccctgt tegtgtcttc cctctttctc acccattttc tctacctgc 1140
tgcacttcca tgcttccgtc tctctgtctc tctcttcccg cccctctat ctctccctcg 1200
ttccccatc tccgtctctc ctccgtgggtg tctcctcctt acccaggaat ccaagccctt 1260
cttcccaagg ggttgggcca aacagcctca gcctggggcc ttctctgcca cccgttctt 1320
cacctgggga ccaagtgcc cgtaaaatgg aatttgggtcc cacatggcca ccagcagggc 1380
gcaaggggtg ggcggggcat gggggaaggc tgaggccagg tctcaggcca cctgctgcgg 1440
cagctctggc tggcggtctt gccggtacca catctggccc ctgctcagtg tggaccatt 1500
ggcccagaac gggactgcga aggccctggc catctcctgg ggaaatgcct ccagtgtgaa 1560
gagagccaca ggctccccga aggacaccag cccattgggtg cagaactggg ggaagtgagg 1620
aagggaaga cccgcagggg ggtgttggca gggcaggggg cagaagaggg acaggggccc 1680
ccccaggaag acagaggacg aagccagaag gagccaggag ctatagatat agacaggctc 1740
cgagtcaaga gtgggggtggg gagaagagag agagcccagg gaccgcacgg tcagggccag 1800
ggcactcaca taggccgtcc cgtgtgtggc ttcgaagagc atgaagggt ccagcagccg 1860
cagtcctca gagaagtcac catcctctgc agggagggcc tgatccccac actccagccc 1920
gtaggggtac aggagcgagg ctggggacac gagaccactg aggctcccct cagagcccca 1980
gggcagggct gtgtcccctc agtccccaa agaaagctcc aggtcccctg agggactcca 2040
gggtggggcc atggctcctc agaccctgg agccctccct gcctgtccac atggccctgt 2100
cctctctcca ggtagggag cacatccatt ctccctctg atctccttg tccaagtcac 2160
ttggttctgt aggactgagg ggaaggatgt cagctaaggg ctggggcca cgtggcacag 2220
tcgaccctt tccagagtcc cactcctac taccacca gcagaagcca cagtatcccc 2280
atggtggctg caggtgctgc gggccaggcg ggcttatacc agggcagagg tggggccagg 2340
gtggggacgg ggcagctgga gctcaccttc cattgttcga ggggtccagg ggcctggggg 2400

tctcccaggg atcctggttc ccatccggtc tgcctgaggc tgggccaggt ctgggggttg 2460
 tgggcagggc aaggaggaa agaggggatg gaaatcttcc agggctttcc cagggggccg 2520
 ggttgccaga ccctggagga accccccacc cattagcagg gctgggcaca agtcaagcga 2580
 tccacagtgg gaaagttgag ccaactgctt gtgaagggcc gctgctgaca gacagctgaa 2640
 catgcaggga gcctcttccc atggggccct gctggttctc ttggagcagg ttagagatga 2700
 gcacacagca tccaggaacg gagtgcattg gcatcaagca gggccaagat gtgtggctgg 2760
 ggagactcgt gggctgctgg ccagccccgg gggcccaggg gtgggcatct gcagggcattg 2820
 gctggggctg ccatggtgga tagtcaaggt caggcattta ggagtgttac tggaccaga 2880
 aggggagatt cgcctggaga cgtgaacggg gagacgggga ggaggagcat acaggcaagg 2940
 gggctcgtta ctgtgcacct gtgagattca cggaccaccc tggaggagga ggctcagagt 3000
 taggcactgg ggactccatc ttcaaagcag tgtcccaaag ggtgctcca gaccctcaa 3060
 cccagacag ccctttacct ggtcaaacca catgggacag agggtcacct gtgttcttgg 3120
 accaaactga ggattaggct gctatttctc atggcccagt gatgagatgc agataaactg 3180
 ggagaacagg gaggtttttt ttgtttttgt ttttgtttt gttttgttt tttgagacgg 3240
 agtctcgccc tatcgcccag gctggagtgc agtggcactg tctcggctca cggcaacctc 3300
 tgcctcccgg gttcaagcga ttctctgcc tcagcctccc aagtagttgg gattaccaac 3360
 acccaccacc atgcctggct aatttttgta ttattagtgg agacgggggt tctccatgtt 3420
 ggtcaggctt gtctcgaatt cctgacctcg ggtgatccgc ctacctcggc ctcccaaagt 3480
 gctgggatta caggcatgag ccaccgcacc cagcgaaaag ggagttttta tttctgtaac 3540
 tggttatagg gcgaaagcct ggaaattgtc cccagaccaa ctcaaaatta caaagttttc 3600
 cagagcttat ataccttcta agctatatgc ctgtgtgtaa gtgtagtttc ttcagacccc 3660
 caattaaact tgtttaatcc t 3681

<210> 373

<211> 4697

<212> DNA

<213> Homo sapiens

<400> 373

ggatgacatg cttgaaatga gtcattgtgcc tgaaaagtca ttaacaaaca acagttccag 60
agaaaagcca ggaaaaactc cccatggatt tagagacaga gctctcacct tcaacagggtt 120
actttttcct tgtctcaggc ttccttggaa aacaacctat aactaacttt ctgggagtaa 180
agcttcaggt ggaagaacaa ttggatcaaa cttggaaaac gtaagtggc atttaaattg 240
tcagtacca aagatacaaa aaaatccaat atggggcacg caaagctgct cctggagtgg 300
tttccctttt gcagtagagg cctcaacagt ccttgaccag cttctcctgt ggctgtgcca 360
ttcttttacc caccctgggt tagcatcagt ggagacacag ccacttgacc ttcagaccac 420
tgttggccct ccctgggccc ttttccttac tggctttttg gatcaagaca tttccatgtt 480
atatctaaat atttattctt gagtttttaa cccaccggct aattcctgct tctctctcaa 540
gccttagctc atatgctgct ccctccgagt gatcttcctt gaccctcgac taggttggct 600
caagggtatt ggagctatgt gctctcccca tatcatccag tacatccct gttgtaacat 660
gtattcattt attcattcaa caagtatttc ctgcattgag tccctgcagt gtagcaggta 720
ctgttctagt gttgggactg tagtgggaat aaaattaagt ccctaccctt gtgaggctag 780
attctagcgc aaggacgata gaaaataccc aagtctatat ttcaatattt ggtagtaagt 840
gctatggagg gaaaaaggca agataaagag acagatgctg gggtgatgct gattgagatg 900
ggctaatacgg aagccttctc aaggagatgg cttttgaact gaggcttaaa tgaaataagg 960
ggtagacctc gccaagactt aggagatgtg tcccaggta gggagacagc aaatggaaaa 1020
gctgtgtgtg actgtcccc ttgggggtggg gggaagggtt tcattaaat tcacagaggg 1080
gttggttagta cctggcgtgc gaaagggatt taaacgtgtg gaacagatgg atgaagataa 1140
tttacaatac ttgccccaga cacagacgtt ggcatgtgta cctcttttat ctggaatata 1200
ctcttttctt tgttgccctac atagatgccc ccagtttgc tactccattg aactttgcat 1260
gcttggagcc cctggcctca gcacactcaa tcgcacaagc cagcctgcag cacctgtaca 1320
gcaccatggg agtcccctgc agagctgcaa ctttgagagt gggtatagt acgtaactca 1380
ggttcttcaa gggatgaaca ctccaacttt gaaaccacta gcctgtaggt gtggacgaaa 1440
aggcagctgc atgttataaa acaatattac tcatactttt ggatcaagct tctttcagtc 1500
ccatgggtag ggaggagggg caatttgctg aagcccactg cccttcagct actcacaagc 1560
caagggccct atgggatctg tttcacagga ctcatgctta tggcagctga gcacatctgt 1620
cctgtatgtc tgccagcagc cacgtccctc tcaactcctgt gacgacagcc ttgactatat 1680

ttagaaattc catttctgat tgcatttcac tgctgaatgg tcctagaatc ctttattgcc 1740
cttgtcccat cacaagagac agccagccac agccactttt atctcaacaa catactgaat 1800
actgacagaa caaacaggca agttgtagat tcaccaggat ttatacatat ttgatttttt 1860
attaccaatc aaaaataaat tccatatatc gtttagcaaa tatcattgtt ttgtgacaaa 1920
agacacaaga gtcataacaa caaaactccc cgagagtcaa actcataacg ccaaaataaa 1980
tcacaaaaat atacaaatta aaatattatg caaaataaat acggcggctg tcacctgcct 2040
acccatttgg atgccctttg caaaggtctc ccttacgtgg aagacacagt ggggtgggcca 2100
gttccagggt atggctcatc ccaggaacca gaggttgaaa taggaaggga aaaattgcac 2160
tgggaagagg aagtcatcag acaacaata tttggaaata atgatgacc tctgtgagaa 2220
gggatgatca atgggccagg gaagaggagg agggccagcc agttggtagt aaccgtgtgc 2280
acagagggtca ctgtggaggt gtgtgcacct gccccttttg cttcacatac cccaccaat 2340
gtcttttgct ctacctggca gtcagggtg tcaggaatat agctctgcca gcttccaaaa 2400
ggacttggga gcaagctgct cctgtacaag actaagggtt tccccact agggaacaaa 2460
agtctggtgt cttttttcct tacagttgag aacctatggg tgtcaccacc ttctctccag 2520
gcttccagga gtcagttcta tggctaggag acctcagact ggccaggggt aggcatactt 2580
ggtgcaagac aatccctggt cctaagagtt aggatactct aggcacctgg agagcagggc 2640
acttgggggtg aggaaaggag tgaataaata ataatcaggc ggaaggcctg cagagtttca 2700
cctgccaggc tctcgggacc cagctcctgc tgcaccagt ggaaggacca acatggacct 2760
tggctcccaca gcctcccaa ccctgggaag cctggagttt tgcagcaggg cctgattcag 2820
ccccaggga gaggcgccag ggcaggaatt cacatgaggg cagagctctt agtacgtac 2880
tactaacttc agcaaggga ggatgacctc tcacgctagg atcacacgtg tgagaaagag 2940
gggctgcaag ctgcatgcct ttaggaggag cctcctctc ctgaggttcc ataagtgggt 3000
ggataaggcc aggtgagcct tgccagccac agaggagagg acataaagaa cctgcttccg 3060
tggcttccca catgtcctct tgtctccacc cccaagaggg actgaagctt ggggattcga 3120
aataaggggt ctgggaaaaa ggcttcagtc aacaagtcag ccttgactgt cattgtgggg 3180
cgggggtggt actgactgct aacaacgcag atgtgatga ctgacagttc cttctggaac 3240
caaaagggaag aaccagaca aatcacctcc aacacagatg ccctcccgc gagggagaa 3300
ctttggtaaa agtgaggga gggcctgggg agcaggggtg agcaatcaaa ggcctgagac 3360
cctgcctaac acttgagtca gccctgtcac aaagggccag ttgtccaaag ggccagatgg 3420

gaggcagggt ggggatgtgt cctcagctga gtcccgactc accaggagag gctgtcggca 3480
gagttctaga tttctgggta cagcagttga caacagatgt gtcctctgc atagctcaga 3540
ttatcatgtc cctgatcaca gctacccagg agctcgtggc ctcagcgttg tcagataagc 3600
tacagcgag gtgctcaggc agctgatctc catgccattt tgttctttgc ttctgtgaag 3660
agctgtcttc ctcccaacag ataagcctcc actggcaggc tctgggatcc cacctccgga 3720
ggaggaggag gaggaggaag ggagagctcc ctgaatcagg gacacaagct ggaaggccat 3780
ggctgggaac agattatgtc cgttgcttcc cgggacaaga aacccttctt cttttatagt 3840
tttttaggaaa aaaatatatt ttttttaaat aaagtctctt aaccctgtct tcccttccca 3900
aaatgatatt taaaaaaaaag tgatgagcct actttagaaa ttctctcagt aaaaaacagc 3960
ctttgcttac ggtagctggc ccaactgcccc ccctatccag ggctggacag tgccacctca 4020
gagctactca gaggtccctg gcagaggcca gatcccccat aggctggggg ccatctggct 4080
gttcagtcag acaggctatc tatccgtatc ctttctggac taacaggttc cctctcttca 4140
tgtgggcca ctggggaggc ccccgaggcagg tgggcagggg gccccgggccc ctctgtcag 4200
atggcattct cgtgggaggc tttgtgcagc aaggagttac gctcgttgag aagagttgtg 4260
gtctcgtcca ccacaggcag ctcagacttc tcggccaagt tctccatgtg ggtggtgcac 4320
ccgtctatgg gaaactgagg gctgttctcc atgcgagaag ccagcagccc gttctggtac 4380
tgctgccgag tgatctgcat gaggaaggga tgagttcatg gagggagggg ctgggaggca 4440
gaccctatca ccaggcctgg agaaacaggc ccaggattga ggctgtgagt tgagagagaa 4500
catgaccagt cagcgtctct ggaagccctt acaaagaaca aggtgcacga acaagagaag 4560
aaagcatctc agggctgggc acagtggctc acacctgtaa tcccagcact tcaggaggct 4620
gaggcgggca aatcgcttga gcccaggagt ctcaagccaa cttgggcaac acagtgagac 4680
cccatctcta taagggg 4697

<210> 374

<211> 3790

<212> DNA

<213> Homo sapiens

<400> 374

taaggaaagc aagacgtctt gaagtatatt ttcttgagat gagtatgtcc catcactacc 60
atgaagtgtg ctcacccttc cagcctcctc tgccctcacc cccggagtta aagtgggtaa 120
gagttggttt gttctgcagt ctttggttgg agtgttgtga aagtggaccc gcggtgccac 180
tagatggcac ttggtgccta gccatggtga atgaccaggg cgaagttagt ctcacagaat 240
accagggcta gaagacatcg tggagcccat ggagtcacc cctccttccc ccttccaccc 300
tgcgcaaaag gggacggccc agtgtgcacg ccgtccggcc atgcccacag ccacagccac 360
agctgaggag tggccgggca ggcagcaggc tcccagcca gggcttgaca cgcccacagt 420
caggggcctc cacatgcctg gcctggctct ggaagtcacg tcttagcttc tgaacaccgt 480
agcgggttat gaggaagttt aatgaagagc ccggtcactg tggccatctt gtgtcccaa 540
ctgcaggaga cgccctgatg tggagtttgt acagctttgc caaaaaatgg ttttctattc 600
tcaaaagtga cccaagccaa taaatagcat tagtagcttc tgtgggggga tcccagagcc 660
cctgtattta ttttcctgt gtttgtctct agtgtcctcc taaacagcct ttcctgtgag 720
tctttctcag aattgatatc ttaatatgt ctgttctagg tgttgccaa attcagtgtc 780
agtgaagttc ttttcctggg caatcttaac atctttactc ttattgtctg gaccttcaa 840
ggtctttgta ttttacacct gcgccccag gctgctcaca gtcggcttg gcctgtcct 900
gcctgtccgg atcttgtctc ctagtcctga ggagcggagg ctgagaactc agtgtgtgtt 960
tgtaaagtgt gaggggactt gggggcatcc cagagtgtc cctccaggcc tgcttcttgg 1020
ttttgtttga tcaactgcgtt cttcaaggga tgaatccaga gccctccatg aggccaagct 1080
tgtccttcaa tcatgtttcc tctcagatgc gtccgtgatg cctcctaagtg tggaactggt 1140
tgtccattgt ttgggcctat ggccaagtca ccagctgtg gaagcagagg tagaagacga 1200
ggccagccag gagggcgact tcagtcacag ctcccatgcc tcagctttgt acctgttttc 1260
aaaagcacia ctgaggtgtg cgggctggag ctgtcttgca gtgattctgg cttcttggt 1320
catggttcag tccagcagcc tggctgaccc actatttctc ctctgcttca gaggaaaccc 1380
aggaaatgcc cttactgcca ggctgagtct ccacccatgc tggttggtgc tggctaggct 1440
gagggggcca ccacttttcc tggctagaag ctacttgacc tttgatgttt gagttctgta 1500
agtcttcgtg ttctgactta ctgcttcaga gggattggcc tgtccccctt ccctttctcg 1560
gctatgggaa ggaaggattg ctcatgtgtt gccttcatca gttacagcat gagacggaat 1620
tcatcattcc ttccgaaacc cctgatattt aatatttaat atttaaaaac ccaattatc 1680

aaaccattaa gaactcatta ctggttctca gcctcctcca gtactagcct cagtgtggct 1740
gctgcataag tatctgtagc ctgtctacct cctgcagtgg ggccgctcgc ctcttccttg 1800
tctactgctc aggctctccc acttcgtggc atccatgtaa agtaggtggc agggcagaga 1860
tgtcactctc attcaacagg gaggatgtct gttgctcaga gaggttgtcc tgaggggctg 1920
gggtattcct gggcctacat tcttcccag gctccaggcc gctgtctctg gaagtaaaag 1980
agccttgtct gaccttaatg caagcagtct gtttgaaccc ctgtaggctg cactcaggag 2040
acagaaggtg tctgggccat cctgggcggc cggctcagcgt tgctaggcag gctcggctgt 2100
ctggccggga cttgggcctg ggtggctttt gagaccagtg aagaaggag agccggcctc 2160
atgccgatgc ggcttgtggc acggctggga tgtgaggag gactcagatc tacacacaga 2220
aaccctctt cteccgccc tccccagct cctacctgcc tcccacgcct caggtgtggc 2280
tgctgtggg accatcccc aaccctttc ctgcacctc cttgtctca ccagttcct 2340
gcagtgtctc tgaccacgc ctccgcctc ctggccgact tgcccaggag gtgtctctgg 2400
ctcacctccg tctgttcac accttctcc ccagtgttc cacttatctt ggatgtttta 2460
gattgaaaca gcctgattcc cggaagaatc ctcttcattc attgctagtg ctccccctca 2520
cctcccactc tccattccc agtttgcaa tgtggctttc gccaccaag tgaaagcgga 2580
ctgagagcag cccttgggga cggcccgggtg cctggctgca aggccgcgt ggggctctgt 2640
cttgggtgcac atggcttgac cggactttcc ctgcttccca ccacttcct cactcccaga 2700
cctccctcat tctttttgtc tcttctttt gcctaaagcc agtccttaac accctattct 2760
tcctctgcag gtggcttgca gacttttccc cacctttggg gctcgtgggtg gtggagaggg 2820
cagctgggtg taagaatgta ggttaccggg catgaccgg cagatgcttg ccagtagtt 2880
ctggaggaag gcccggaat ctgcaaatga gcgcattccc caggcagttc ccatgcaggt 2940
gatccacgga ccacatgttg agaaactgca gtcaccctta gggccacacc gtccctctcc 3000
tactgtccc ctctctgtag tgactggccc tgaccttcag gactgcactt tccactctac 3060
caggaagccc tatgacatcc tcaggctccc cagacctgca gcttgcatgg ggcccctccc 3120
ttcttccaca cccacctcc gtatgggtccc ctgctctgcc ctctgtcttt gctggcccct 3180
ggccgtact cccactctca gacaccagg ggtgggtgggc cctaactggc tggcccctcc 3240
cagcgtgcc ctctgccgtc cagatgctgc agtgtggcca gatttacctt ccagtaacat 3300
acttctagtc accctctc cctgcgaagt atctgcagt gctgtttgac cagaccacaa 3360
agttcacatc tcctgagctt agtgtccgtg gctgtccacc tcccagccat acttgactgt 3420

ccccaaactc tccctgcagc cacatgtttc ccatgacctg tgggctctgc agatggacct 3480
ctctccgcta gagatgccct tctcccaaat ggcttccctc ctggaaggcc cagcctgagt 3540
cctcgtctcc tttccagtgc ttctgccaga agcatcccca tgatgtttgt accgcacagc 3600
actttgtgtc tcgctttgag cacttgccac tctggctggt gctgctgcca ctgatttgtt 3660
actgtcttgc tgccctttct agactgtgag ctcctcgtgg gcagggaccg cctgtgttct 3720
ctgtatttcc cacggcgcct agcacagtgc cttgcacttg ataggtgctt aataaatgtc 3780
tgctcaactg 3790

<210> 375

<211> 4603

<212> DNA

<213> Homo sapiens

<400> 375

catgaacaca ctcagaaata atgtttgacc aaatatctgg gcaccctgta gcccagtcaa 60
gttgacacaa agtgtacagt cacagggtga agggctgatg gatgccatct ctacagaggt 120
ctgggccttg tgttggttcc accagagggt gtgctggcag gctggcagcg agggatcagg 180
cctgggatgt ctgtgcagtg ggctagttac tctcctctgt ctggaccaca gagggggaagg 240
aagggcctct ttctgcagct tccttggctg tttgggtctg gccaccagtg gtaagatggc 300
cctagtcttc ccaggcaggc cagtgggagc cttaccacta ggtggagtga aatgaattgg 360
cttaggtgga aaagattcac accagtgata atggttcatt ttcagctcca tagaaaagtg 420
aagccaggtt ctggtgggga ggtagacgct gcaggcagcc agggctgcag cttccgttct 480
ggactgcctc cagcctggac gcagtggttt gccagctcct ctgctactgc cccaggtgac 540
agttccccac cactggcatc ccagccctcc tcttcccagg tgctgctttc agctcctccc 600
agctgctgct caggtggaag ggaaaacat cagctccaca cgctgcttgt gggctcgtta 660
caggatttac tgcacacaga attagccagt gcttatcaag ttgagtcttt tgtattaata 720
tttcaaaaac agtgtggtct gaacctttcc agacaaatct tacatgcaag attatattaa 780
aacctctctt aagagaagaa acctccagtt ggaggtgttg tgtagccaa caaatgtaga 840

ttaattgtgc tcccctgagt cagtcattgt ttaatatgct gcacagatta acaccttcag 900
gaattctgca cattgtaaag tgcaatacaa atatactaataaaaataacag cagacattta 960
ttaagcttac cacgtacccg cagaccctat gctgcatacg ttgaatctac tatctcattc 1020
atcctcagaa tgattctatg gggtagattc tattactgtc cgcattttcc agatgaggaa 1080
ttgtgactca gggagatgga tgtagcctgt cagtatggac tctgtgctgg ttagacaaaa 1140
ctgtcctggc cccgtaaagc cagtgttttc ctcccacgat gatgcctcca gtttacatcc 1200
aaatgtcaca ggaagaaagc tttcctgcag tccagggccc gactagggtcc ccacagtcac 1260
agcagatttg gaaaggcttt gtctccaca caccacttaa aagcaccaac ccaagcagcc 1320
cgagggctct ctagcagccc acttcaagcc gccacactgc ccagaaagta gcctccgggg 1380
cagttttgct tctaattgct gtgtctaatt cttgagacat ggttgctttt gagaaatgga 1440
gctgctcagt gagctgtcgc cccaccatc cccaaatgcc tggtcagccc taaccagagg 1500
agagcctggc cagccagggc agcccccaac ttcattcagca gcaaggagct tgtggtttga 1560
ccattacctt tttgtttgtt tgtttgtttg ttgtgagata gaccttgct ctattgcccg 1620
ggctggagtg cagtggcggg atctcggctc gctgcaacct ccgcctactg ggttcaagtg 1680
attctgcctc agcctcccga gtggctggga ttatgggcgc gcatcaccac gccggctaata 1740
ttttgtgttt ttggtagaga tggagtttca ccacattgac caggctggtc tcgaactcct 1800
gacctcaagt gatccgctg cctcggcctc ccaaagtgt gggattacag gcgtgagcca 1860
ccgtgcccag tctagtacct ttttcttagg tggggctttc tagaagaagc agaataaaaa 1920
aggaaaaatat ttagtttctg aataaaaagg ggctattggc aaccagggtt ggatggcgctc 1980
agaaggaatg cctgaagaag tgatatgcca tgttgctgcc cagtttcaca ctggaagaga 2040
tcctgtgcaa agatccagcg gcctgctttg ggttccagta aacacaaaag tacgtactgg 2100
cactctgcgg attacagact cactgacaac ttcattggatt catagatcaa gttttgttac 2160
attgatccaa ggtgaaggca cgccacagca ggttacttgt ggccttggtta ctgtctgtag 2220
ctccttgagt tacagatgaa agttcagcta aagatgaaaa gggctccagg cggggcagga 2280
aaggtagcat cgtgaggcca gcatctcacc tatggcattt tgacctaaaa gagctgtatc 2340
aacagaggta aagtgacca tacatttacc ttggggtag acagcttcta gttccttgga 2400
ctatctggaa ccatgtctct ttctgaagg gccacatgca gtgaggaacc tgccctggca 2460
gaggaaactcg tgttcactct ctgaggcccc ttcgtttcca actgagccat gtgcttagca 2520
gttgggggtt tcctactaat ttttcggaga atgttattgt ttgaaaagtg ctctccacag 2580

agcatgtgat tagatctttt tgttacttgg gtgagaatct agagctcctg tcttgccttg 2640
acagctaata ttcattgcca tctattgtgg tcctgtttcc aaagaggaac acacaacaga 2700
gtttctgtgc agtgaaacct gtgtcagacc taaaggaggc aagggtgct gaggagcttg 2760
aaatgaccct taaaagatat caaggagaag agttgtcttc atactctctt ctatctgtct 2820
gtccatctgt ctattcatcc attcatccat ccagcattca gagcaggtct cccatatttt 2880
aatgaaggga acctcatttt tatttcccca agatctagag attaggaaga gtgcagacag 2940
tgctgaacgg ctaaaaagaa acgattcaca gcgagggtct ccttccttcc ttatgggaaa 3000
ccaacaaatc atagccagat aggctggact gtctacagag aaagacttca catgtggcag 3060
gctggggatt ccctgcctcc cagtccagct tagtgcagat taggggatgc aatttagcct 3120
atactgacc ttctatgacc tcgcagcatc ctggcaatt cgctctttcc tgtttcctga 3180
aaacaaaggc cttgagtgtc cctgcaagcc ctgttccttg tgtaggcaac tgggatccta 3240
tctctggggt ggggtgcaact catccttctt ttctgaatag tgtaaagt gaatttagaa 3300
tgtcgtgatt gttagtaata gcattactaa tgttccaagg ccctcggaaa ggtcacaaca 3360
atatgtcttc ctttcaagtt gattctcttg gtacccatt cccacccca atgtggtggc 3420
tgagtggaa gaggccagc atcttccaag cacagctccc tgccccacag ttcctcctc 3480
gcacctactg aggttctgag ctgtcagccc ccagttattg aaactcaaaa aattagggaa 3540
catgataacg cattctgccc taatattgtc cttttaatgt ctaattatca ttgtagacaa 3600
agtggcttga acttaggctt tcctcctaga agctttacca cttttactgt ttctatactt 3660
ttgtagctaa taagtcaa atgtagaacaaa gagaaggctg catttgttca ggaaactgta 3720
aatctgtccc atttgatcac aatcctgttg aaaggaagaa gccttacgag gacagtgtgt 3780
ttgctacaat gctgagccgt gacagctgca gcagcggctc ctggagcaca gggctgctgg 3840
catgggctca ccacctcac agccatttgt ctggcggctt gtattcagat gtatttgttc 3900
agtaatcaa aaatggaagg gtgatttggg accttgagca gcaggctggg gatggctgtg 3960
aattctgctt tgcacttgcc cactacatca acacgccaag aaactcacct gccccatccc 4020
agtgcattct gaacatttct tatttttatt ttcttacc aa ctttctctct taaaatcagc 4080
ttcattaaaa tggatttttc tagagtaacc accatatcac ctccccact ctgagtcctg 4140
ttccagtc aaccatttgt tacttgattc agttccaaat ataattgtgt tctgctactg 4200
ttaagtcatt gccttatagt caacctcaag ggtagtcata aactccaaga gtttcacgtg 4260
tctgactata ttcttaggag attgatgggt tacatttttc tcctcgatag tggatcatggg 4320

ggaaatgtgt taatttttca ctttagatgt ttgtgaaatg ttggggagag tgaggggttt 4380
 gttcttaagt ggtgggcat tgacccaaag tatttttaat tccttttta ggctgcattt 4440
 gatgccagaa ggcaaacaca acctgcattt gcgttttgca gatgaattca acaagtttagc 4500
 agaagacttc ctacaatgag aatgcacact ccagtcttgg tggttccttc gtgtggggct 4560
 tgatcgtgtt gctgcctgtt aacatgatgc ctttgaaact ctc 4603

<210> 376

<211> 3578

<212> DNA

<213> Homo sapiens

<400> 376

acaaggagac taccctaggc ttacacagac cccagggggc agggcccctc agtgcctctc 60
 aggaaggcag aaggggctgt ggtcctggcc cagttcctgg gactcctgcc tcaggctgca 120
 ggcaactccct ttactctgtg cacttgcagg gatgaaaccc acctccaact ccacggactc 180
 tactgcccag ggcttcccca gccacaaagg agagcttgtg cctgggacag cgaccacccc 240
 caggacagaa acaccccctc ccgggactcc tctaggaccc actgtcccat gtgggaccgt 300
 tccacaggtg ctactcttcc agggcgcaaa tcccagcgtg ctcttgcca caccacatc 360
 ccaaagctct ccggctgtcc ccaggcctgc agtctgctgc accgtgctcc cacagtgggg 420
 cccacttccc tgctccgcca ggctgctcca cacagccctg gcaccccttg cccctgccc 480
 acaccccctc aacctcgtac acaggcagag gccccgcca gcctccacc aagcacacc 540
 ccggcctggt ccacctgcaa aaccaaacct gctggactcg tcatttccc caaccagcct 600
 ggcttctcca tgaacaaccc cccaagttg gggactgctc tccttggtga tgacaagggt 660
 cccccactgg tgtggcccct ccagacctg ccacgacctc agtgacccc ccattgtctc 720
 cccatcctgc aacttgggat gttgaggctt ttaagttgtc aaactagaac aactcgagat 780
 gaggacctcg gcaggggggc tggtgacagg aggatggatc gccaggagga tgatcgccag 840
 gaggatggat cgccaggagg atggatcgcc aggaggatgg atggcccaga gctcagaaga 900
 ggtggttagg ggcccagccc caggggaccc agcaggaaga agccagacaa cttctgaggc 960

tcccaactgaa cccagacccc accaggctga ggggcttgca cctgcggagg aggagggagg 1020
agtcaccctc tgcagtaggc aggggagaga ggtggagagc agtggctttg catcctcctg 1080
ttcttgccca gggctcccaa aacaaatgcc accccagcac acaaaccaca caggcacaca 1140
gacacacatg cacacacacc acacaggcac acacctgtgc acaacacacc acagacatac 1200
cacacaggca cacacacagg cacacacgtg cacacaccac acgggcacac acaggcaaac 1260
acaattgcac acacgttctc acacagacac acacgggcat acatacatgt atctacacat 1320
atacacgcat gcacataagc atcacagtac atgcacaaac atgcaatata catgcagaca 1380
catacacagc aaccaaata tcaaggaaag ggatcaaaat attaacaata agtgaatctg 1440
ggtgaagagt attctctata ctatgcttac tcttgcaatt tttctgtata tttgacttta 1500
tttccaaagt aagtttttta aaaaaggaat gccgtcacct caccagccac caccatac 1560
caccctctcg aatacacctc aagcagctct tcttgatgtt gggaccagag tccctctctc 1620
accgctctc tgcagggatg cagtgtcccc agctagtga gacagacacc tgtgccccca 1680
ccccagcccc aagctgctgc ttgtccctgc acctccaggt gtcacgccc agccccaggg 1740
tgcagcaagc ttcccaaat ataaggggga gggggaaggg aggccatccc atccctgagg 1800
cctggcagag caagttggcc tagggacctg gtattctgag gcccgtcaa ggccaccctc 1860
ctgcacacct gtaccagac tgaggaatga cctcacctgc cacctgccac catctttgga 1920
gaaggctagg gctacgttag ccagcttgg acgagcccaa gcagcaaact gcaccttgag 1980
gtctcctccc gtgatgagaa gatcacggca gaagccggca cttgggggag gcaggggaac 2040
catgacacca gctctggacg tcccctctg tctgggctgg acaccgaacc caggcacttc 2100
tcaccccgaa gcacaccatt gccacccct gtgccctgga ccctccacag ggccaagcgg 2160
gggacgctgt ccagagaaac ctggagcctc cacagggcc aagcgggggac gctgtcccag 2220
agaacctgga gcctccacag ggccaagcgg gggacgctgt ccagagaaac ctggaccctc 2280
cacagggcc aagcgggggac gctgttccag agaaacagct gctgcccacc cacagaaagt 2340
ctcctcttc aagcctgaca gtccacaggg actgaggcaa cgctcttct ggtctcaca 2400
gtggtggcca aagcccaaag ccgccaaggg cctcatcacc tgtgcaccac ctactccact 2460
cccagtagc tgggactgca ggcgcccacc accacgccc gctaagtttt tgtatttttg 2520
gtagagaggg ggtttcaccg tgttgccgg gatggtctc atctcctgac ctctgtatcc 2580
gcctgtcttg gcctccaag gtgctgggat tacaggcgtg agccaccgcg cccggcccag 2640
gcgcttcttt taactccaga tgtgtgcacc cgaaagttag ccacagttac gtgatggagc 2700

aactccaggc tgcagggaaa cgtgagcgcc ggccgtgggg atgcgcgggg aggagggcgg 2760
gccaccaatg cctcgccccc actgtgtgga gtccacagga tggagacgga tactgagggga 2820
agccatgagt tgtggtctgg tgactgaagt cacagagtaa cggggctgcc ccaagctggg 2880
agccaaggtg cggactcctt tctcacgggc ctctatggt gagatcacag cagaagccgg 2940
cctgggctta cagctggtct ccggccagag agggcatttc tgtcctacca aagactgcaa 3000
caattctgga cagcgagggg cctggaggga caggattcag cccaaagtac cacaggccac 3060
acgtttcctc catgtcatcc cctagcctgg ccatttaaga cccaatgcag acagcaacct 3120
gcagagccag cctgtaaccc accagaagcc cagagcacac ttgggcttgc acctgagcta 3180
ccaccagcc cctccaagga aacttctaca gccagaggca cctcaaactg taaatccagc 3240
tgaaggcttt tccaatagct tgcaatttat tatgacattt aagaattcta gcataggcca 3300
ggtgcacggg ctcacgcctg taatcccagt actttgggag gccgagacgg gtgggttacc 3360
tgaggtcagg agttcgggat cagcctggcc gacgtggtgg agcccatct ctaccagaaa 3420
tacaaaaatt ggccgggtgt ggtggcacgt gcctgtggtc ccagctgcct gggaggctgg 3480
ggcgggagga tcacttgaag ccgggaggcg gaggttgac tgagctgagg ttgcactcca 3540
gcactccacc atgggtgaca agagcgaaac tccatctc 3578

<210> 377

<211> 4694

<212> DNA

<213> Homo sapiens

<400> 377

ggaaataatg tttcttgGCC tcttcagcta acttttaagt ggattttgca aatgaaaacc 60
agtattactg agttttacat actcgaactg cccaaatggt tgctgtttta acagccaaat 120
aatcaagttg ccattagtaa tttagtggag ccaattgatg gcttggttgt attttataat 180
tttatcttta tacatagtga tagatttaag tttagataga catcattttg gtatactggt 240
actgtggtca ttgtcaatgt ttggatgtat tacgattggt atagtgcaat caaacttaga 300
taattttaat ttttaagcact gatttattta gatctttcct tgtggaaaaa taaggtttgc 360

ctaaggcttt ttgctttttt atttattgtt tcatttcttt attagattaa cttttgggaa 420
acagtcttaa aattggagaa aatttccaca tttaggaaaa acagcttccc ccctgtgggc 480
catttgagag taaattgctg acattatgcc atcacatctg gtatgtgggt attcccacaa 540
gtcaggacat tttatataac tacttcataa tcagaaagtt aacatcaata cacttgatca 600
tttaattctc agtttctttt caagttttct taattgtcta taatgttctt tgtagcagaa 660
ggatcccatc caggtccatg aatttcattt agttgtcatg actctttcag tctggaacag 720
ttcctcagtt tttctttgac ctttatgacc ttaaactctt tgaagagtaa agtccaataa 780
tacagaatgt ccttccattg gatttctctg aactttttt atgataagat ttagatgata 840
atttttttt tggcaagagt atcacagaag ttatcccatg atcttctcac tgcattctat 900
caggtgacct gcaattatta ttatttttt ttttcatctt ttaagttcag gggtacatgt 960
gcaggatgtg caggatgtcc aggtttgtta catagcttgc cattctgtgt ctttcattgg 1020
aaaacacatt gagatttaag agtttggaga atctgatgat tatgtgtctc agggatgata 1080
tctctgtgga gtatctcact ggagttctct ggatttcttg aatttgagtg ttggcctgtc 1140
ttgctagaac taacctgggg aagttagttc tcttgatcc tgtgctgaag tatgttttcc 1200
aacttgggtc cattctcctt gtctttttca gaaagatcat cttcaagctc tgagattctt 1260
ttcttggcct attctgctgt taataattgt gatttcattg tgaagttcac tcagctctaa 1320
cagtgtggg attacaagcg tgagctacca caccagcga ggaagccaag tttaacgtgt 1380
gtgtccact cctccaacct ggccaaaggg cagtcacat cactggccac tgctgaccac 1440
agcctttaga aactccctt gaacgtgctg ggctgacctt cctctgatca caggcaaggt 1500
tgtagatgag catgagagtg tggagcagag ttggcgagtg caagtcgagc ccatcaacct 1560
ggacagctgt ctccgtgctt tcaccagtga ggaagagcta ggggaagatg agatatacta 1620
ctgttccaag tgtaagacc actgcttttag caacaaagaa gctggatctc tggaggcttc 1680
cacccttctt gattattcac cttaagcgat ttcaatttgt aatgatcag tggataaaat 1740
cacagaaaat tgtcaaattt cctcgggaaa gttttgatcc gagtgctttt ttggtaccac 1800
gagacccggc tctctgccag catcaaccac tcacacccca gggggatgag ctctccaagc 1860
ccaggattct ggcaagagag gtgaagaaag tggatgtgca gagtttggct ggggaagagg 1920
acatgtcct gagcaaaagc ccacctcac tcagcgctaa catcagcagc agcccaaaag 1980
gttctccttc ttcaccaaga aaaagtggaa ccagctgtcc ctccagcaaa aacagcagcc 2040
ctaatactg cccacggact ttggggagga gcaaaggag gctccggctg cccagattg 2100

gcagcaaaaa taaactgtca agtagtaaga agaacttggg tgccagcaaa gagaatgggg 2160
ctgggcagat ctgtgagctg gctgatgcct tgagctgagg gcatatgcgg gggggcagcc 2220
aaccagagct ggctactcct caggaccacg aggtagcttt gggcaatgga ttcctttatg 2280
agcatgaagc atatggcaat ggctacagca atggtcagct tggaaaccac agtgaagaag 2340
acagcactga tgaccaaaga gaagacactc atattaagcc tatttataat ctatatgcaa 2400
tttcatgcc ttcaggaatt ctgagtgggg gccattacgt cacttatgcc aaaaacccaa 2460
actgcaagtg gtgctgtac aatggcagca tctgtgagga acatcacct gatgaaattg 2520
acaccgactc tgcctacatt cttttctatg agcagcagag gatagactac gcacaatttc 2580
tgccaaagat tgatggcaaa aagatggcag acacaagcag tatggatgaa gactttgagt 2640
ctgattacga aaagtactgt gtgttacagt aaagctacca ctctggctgc tagatagctt 2700
gggtggggagg gagatgactc cttgtagctg atacttggca aaagtgtcac tgagaggcaa 2760
gctaaatgta gttattttat cctgttagaa taaaaattct aattaaaata gttaacttta 2820
agagtagtag taattttatt ttgaagtctc atgcaagttg tctgatagag aactttcagg 2880
cagatcccac cattagcctg taaacaaaaa gtttggcacc agccacctgg gaccaaataa 2940
gaattcaatt gtgcttgtcc agatatgaac aaatatgtag tgagtataga gtttatcaat 3000
aatcataaca aatattaaag atttccttgg agtcaaagta aaaaacaaaa aattgtaatg 3060
ttgtctaggg atgacatgat atgctacctc ctttttcctg aagttttatt ccattctgtt 3120
gacaagatgg agaaagcaag atcatgaagg tgtgcaaatg attcttacgg catgggcgag 3180
gatttttcaa tttatttttt aaagtttcca taccctttct ttgtctttct tgctttttgt 3240
ttttgccgtt gtgtttatgt ttgagataca accagtcatt ggtggcaggg gcatagagtg 3300
gtcagtctga aaggaggct ctcttaagag ctatgtgcct tccaccaga gggagacca 3360
gtagaaagaa aaacatcctg ggaaatccag ctaccatggc cctcccagtg gaggcattct 3420
acatttagga tacttcaggt atcctcagaa atgtattctg cccccccgg ccccgcccat 3480
gctgagggaa ggggagcagt tgccaatatt tgcaccatct tcacatgcac atgttgcaac 3540
aagagcttct gggaaggtaa gcggcatcgg agctagatca cgtttcacaa ttagtggtgg 3600
ttcttttcca tgtttgtttt gcactttaaa aaagagagaa cacatgcaaa tgaacttgct 3660
tgtgtgtatt tgatggctcc aagggtata aattacaaac aaaacacatc ccagacatta 3720
ggagttcata agtatattta atgaaattgg tggttttagg aagtcaactt tagttttgct 3780
ttgtttgcat gtccactaat ttttttattt tgatattagt cttttttaa aaattttaca 3840

gtagtcattg aaagttatgt ttctttgttt acttcatttt ttcctctaaa tattcaagac 3900
 tgggacaaaa gtataaatat tatttatctc aggtagaatt tttttggtgt agttttttta 3960
 tatatacttg aaggaaatgt ttcaccttat ttttggtcct tgtttattca tttagaccct 4020
 gcaagttgat tctcattaat tgtcagattc cactacactt tcttcctcat aggtagtaat 4080
 taccagtgtg actaagcatt tgtgttctga tatctgaggc cagtaactat taatatctag 4140
 ttctcagagc atttggaag gttatcttaa atggctacct aaattgaaat ccttttcaga 4200
 aaaaatataa ttgcaaata gtaggagtg cctaaattat ctaatgtaat aaagtcagac 4260
 aaaatgcata ctttatagtt caaggttttc ggtatataaa atctgtcctt tcttacctgg 4320
 acatgtccca ttaaaaagt gaagatttta aataatttct ttacagatgt tttatttaag 4380
 caggtagcac aatctactaa tgttggttga tctgtgtttg ttatactggt tgtaattaat 4440
 ttttttaatt catgaactag cggaaaattt attaaattaa ctattaacca cattcacctt 4500
 gtaaatgact gtataaaact tgttgacaat gcactgactt tagaaagatg ttaatgtgca 4560
 taaatagagt gtaaataaaa tagtggtgat gtactgaaat atgaactgta taaaagtat 4620
 tagtaattgt atatggggtg tacctgttta tctgtaactg ttatccaaac aaattaaata 4680
 ctgtggatgc cttt 4694

<210> 378

<211> 3623

<212> DNA

<213> Homo sapiens

<400> 378

gttgccccgg ctggaataga gtgggatgat catggctcac tgccatctcc aactcctggg 60
 ctcaaacgat cctccacct ccgcctacag agtagctggg actataggta cacagcacca 120
 aattttctgt agagacgggg gtcttgcttt gtagcccaca ctagtggtga actcctggcc 180
 tcaagtgatc ctctgcctt gatgggatta caggtgtgag ccaccacacc cagcctaaat 240
 gtttatctca ttggtcagtg tcagaactag gattggaatt tagattgta atctcttgcc 300
 acaagatagg aaaatggagc aagatgagga gaaaaaagca ttaaatggga gagaacaccc 360

ttgtctgagg tcagggacct gggaagcaag cactgcttg ccactgtcac tgtgtgttac 420
ttggacagtg ccttattttc ccatctgtga aataaaagag ctggataaga acctagttt 480
tgagatcctg tctcccttaa aagctgaaga caaaggtaac tgatccaagg gcagacaagg 540
gatggtacca tcactcctag cttggactcc cactgctgac aaaatttgct ctttcaaagt 600
tgagatagct accatgggga agagcactta gttctatact gaatggctcc aggcattttc 660
atgaaagctc tttcagcttt ggggaagaat attcatccat atctttacc catcatatta 720
gtgtctaagc cctgcaatca ggcattgtcag ccactgtgat gaatgggagg gctgcagggc 780
agcactgtcc agtagaaacg aaatgcaagc cacatatgtc attttaagtt ttttttttt 840
gagatggagt ttcactccat caccaggct ggagtgcagt ggcacgatct cgcctcactg 900
caacctccgc ctcccagggt catgtgatcc tctgcctca gcctcctgag tagctgggat 960
tacaggcata tgccaccatg cctggctaata ttttgtattt ttagtagaga tggggtttca 1020
ccatgttgat caggctggct tggaactact gacctcaggc caccgcctt ggcctcccaa 1080
agtgtggga ttacaggcat gagccaccgc gccagctaa tttttgtatt tttattttat 1140
ttattttatt attttttggg agacggagtc ttgctctgtc acccaggctg gactacagtt 1200
gtgcgatctt ggctcactgc aacctcagcc tcccaagtag ctgggattac aggcatgcac 1260
catcatgccc agctaatttt tgtattttta gtagagatgg ggtttcactg tgttgccag 1320
gctggctctg aactcctgac ctcagggtgat ccaccggcct cagcctcca aagtgtggg 1380
attataggcg tgagccactg caccgtcct aatttttgta tttttagtag agatgggggt 1440
tcacatggt ggctaagctg gtctggaact catggcctca agttatctgc ccacctcagc 1500
ctcccaaagt gctgagtaag ccaagttttc taatagccac attagacaag taaaaggaaa 1560
caggttaaat tcattttaac atgttttact taaccaaat tatccaaat agcatttcaa 1620
catgtcatcg gttttttagt ttttttttt ttttgagata gtgcttcgct ttgttgccca 1680
ggctggagtg cagtggcaca atctcggtc actgcaacct ccacctcca ggttcaagtg 1740
attctcctgc ctcagcctcc cgagtagctg ggattacagg caccgccac catgcccact 1800
aatttttgta tttttgggta gagatggggg ttcgccatgt tggccaggct agtctcaaac 1860
tcctgacctc aggtgatcca cccacctcg cctcccaaag tgctaggatt acaggcgtga 1920
ggcaccgtgc ctggcgctcat cggtattatt taaatgaatt atgttacgtt cttttgtgct 1980
gtcttcaaaa tctgttatat attttacact tacaccaaat ctcaattacc atggtacatt 2040
tttatctgaa atgcttgacc tttattttga tttcataaaa ttcattagttg gagaagtaga 2100

ttcacatatc caagttgttc caattatata atagttttcc aaaaactgag atgggtgtcc 2160
atTTTTTTTT taagtaaaga tgcaggtctg gttatgttga ccaagttgct gggttgtttt 2220
gttttgtttt gagacagagt ctcactttgt cacccaggct ggagtgcagt ggcatgacct 2280
cagctcactg caacctctgc ctcccagggt caactgattc tcttgcata tcttctgag 2340
tagctgggac tacaggtgta tgccaccatg cctggctaata tttggtattt ttctcagaga 2400
cgggggtttca ccatgttggg catgctgggtc ttgaactgct gacctcaggat gatccgcca 2460
cctcggcctc ccaaagtgtt ggtattacag gcatgggcca ccacacctgg cctcagctgt 2520
tcaattaaaa gttaaataca cttaaaattc tatgtttcat tggcagtagt gcaacattaa 2580
tactgagtag ccacatgtga ttagtggcta tggatttga cagggaaggat acagaatact 2640
tccatcaaca tagaaaattc tatcagtcta gctctagggg cagatagtc ttccactgac 2700
ttgggcaagt cactctacaa atggcatcta cctcacatgg ttatggtgag aattcagcgt 2760
atgtatgtac atgcaggcac acaatatgca cacagacaca taacatagta caccctttcc 2820
tgaaaagcct gacacatgga gctcaaacat gagtgccacc caccctggg cagcaccaag 2880
atggctctag tctgggtgcc tttgtctcac ccccatgcct ttgctcggag tgtgtctctc 2940
atTTTTctgc cactttgacc ctgtctctga tttggctctg tctgacata ctgctatatg 3000
ctttgtcct ctcaatttcc tctgccctca tgccagcagg agtcatgcca gagatcatat 3060
ctgagaaaagc aagacaattt tgtgtgtgtg tctgtgcca tagaggagt ctggttgtgt 3120
tgatatagtt gtagattggt tgtgtttaca cagttgtata tattgacacc cttgagtgtt 3180
atgacttctt ttgggggttg tcgcctttta aatcataact tttaatggga ttccatttta 3240
gtctttgtga agacataagg ttgttggcag gcatctgtcc ctgggagcat ccaagcagaa 3300
aagactaaga ctcccttgta gacagatcac tggccggcac tgaagtgtgt ctgcatggca 3360
ccacagggt ggaagaccct tgaaggcagg aattcaagga aatgtatgat gaattttggc 3420
attgccatca aaagcagaac aggcatggaa aacttgggtg agtgggcgag acaacctcct 3480
caccacagca gagttccatc catgcctgga taatgaggga gggatttgtg tccactgcag 3540
tggggaacca tgaaggacac atcaagggtg tggttggcct gtggtgctct ttggaggaat 3600
gaataaaaat gaatagaaat cct 3623

<211> 3670

<212> DNA

<213> Homo sapiens

<400> 379

```
atgagagtga aatTTtTgtat aagcaccagc tagttatagc taaagactaa gtacttccta 60
taccaattcc aggaaataca gaagtagaca tcctgacttt ctatcaattt gagtaagaaa 120
atcccatccc tccatctcag tatgtctcca ggcaaatagt ttccagtagt ctcttggact 180
cttacctcat ccagtccctt aatctataac tccaggtagc agatttcctt tactaaatcc 240
agtaagctta atggtatctt cagaatgaac catgccctcc tgttggtatg agatcagcat 300
gacctgcat ctgctctgtg tcatactcgg ttatatgttt ctggaggcaa taaaaatag 360
gctcataaat agtgggaaaa gactacttta tctttttgga aataaaggta acagaccag 420
agaaagcccc atccctgttt ggaatccctg ctgagtcctg gtttcttatt ctcttctttg 480
taggctgtac tttcgcagtc aagtcaaagg ggagacggac cgagaacggc tgctccttgc 540
ctctcaaacc agtagagaga tagtggcagg gaggtttcct atcaacaagg aattggctct 600
tgagatggct gccctgatgg cccaggtaga atatggggac ttggagaagc ctgccctgcc 660
aggccctgga ggcacatccc ctgccaaggc tcagcatctt ctccagcagg tccatagacag 720
gttccacccc aggcgtata gacatggggc ccccgctgaa cagctgaggc acctggcaga 780
tatgttgacc acaaaatggg caacattgca aggatgctcc cctcctgagt gcatccgcat 840
ctacctgacc gtggccagga aatggccttt ctttgggtgct aaactttttg ctgctcagcc 900
tgcccagctg tcttccaagg agaacgctct ggtgtggatt gctgtgaatg aggatggcgt 960
cagcatcctg gaccacaaca ctatgcaagt gcacatcact taccctact cttcagtgc 1020
aacgtttggt ggctgcaggg atgacttcat gcttgtgatt agatctatcc cagacaagag 1080
ctctggaaaa agccacattg agaagttgat cttccggatg gctgctcca agattgcaga 1140
agccaccttc atcatggcca gctatatgaa ccattgcact acaactgtga accccccac 1200
caaccacccc ggagcctgcc agctgtggga actggatgga cgacagttct tttcttctgt 1260
ttcctgtgct accaaggggc caacgttgct gtgaatatTT ctcctaccg attccccacc 1320
accactagtg cctctggatt tagagatata taccctaggg tatgatacta ctgtgacggg 1380
tctaacagcc cccggctact cttgttctgt gaaatgtgta ttttagtctc tgtgaagcct 1440
```

ttactctcta ggtgccttat aatgtttcag ggctcaactt tttaaatacc agaccagtg 1500
ttaaaacat ttattccttt ttccataaga ataatgactc cagatgctac ctgattctag 1560
acatagacag ggatgatcca ctgttactga gggcatcagt gctataagtt aaggctttct 1620
gcactagtag tctcaaggaa gctaattttc tttctggggg gggcggggga cacagtgtca 1680
ctatgtcacc cagtccacag ggttcaagca attctcctgc ctcagccttc ggagtagctg 1740
ggattacagg tgtgcgccac catgcccggc taatttttgt atttttagta gagacggggg 1800
ttcaccatgt tggccaggct ggtctcgaac tcctgacctc aggtgatctg cccactttgg 1860
cctcccaaag tgctgggatt acaggcatga gccatcgccc agcccagaag ctaatttttt 1920
aatattgtat atggtcttat ttatacttga agttttgtga acgtcgctaa acaggatagg 1980
actaaaattt ccaattctcc tacactctgt cagaagccta gaactcacta aactgggctg 2040
cctttcccaa atgggaaagg tgctgacaga gttggagaaa aaagaataga ctcatTTTTT 2100
cccattattg gtatgtaggc attggtacag ccccttctgg ggcagtcttt gcaggataac 2160
atgctatacc tgctaagatt caagctgttt tcctcacact ggactttagg ccaaaccag 2220
taccacgcaa tgtgcaagca agggcaggag gtaggtccaa tctgaccct cctgtctca 2280
ttttaatgac tggacagcgc tcggtgaagg ctgtgttcac tgtagtgggc catcatttgt 2340
ttccttcttc ttgtaaaaga ccaagcaaat gcactctgct ttttgctgct gtaagaccac 2400
caaaaatgag tcagaaacac agaagactat ttcaggcatg tgggcctgga tatgtctctt 2460
gagacttctg gcaaacttct gctgggaatt agtttgaggg tgagggtaca tatgtgacat 2520
ttgccctagc ctaagagtag caggtaaaaa aaagtctctt tcactttttg cttactgat 2580
aataccataa tccccctcaa ttcagacctt ctgattgagt gcagaggaga ctagacagtc 2640
tcctctagac aggttgtaga cacacctcc cctaacaaaa acaaacgaa agagttcata 2700
ctctgatttt ccaacatcta ggaaactgag ttttatttcc tagctctaag gcagccttac 2760
tatatgtcag taaagtgtg aaaactgtat atttagcagt agcacccaaa accaagcctt 2820
taacccaac aatgtgtgta tcttttgac agcaaaaact gcgaggccag aactagttta 2880
tctgaacacc tcagctgctg taagcttctc ctctctcacc ccgtaaactg acaagcatga 2940
tgaaaaaaga agcagatcca agtttctgcc tcttttaaat gtacttgact ttgcaaggca 3000
agtggtttta cagccatttc tgttcacact tttcaccca caacttgggg atctagctga 3060
gacatttcta cctcgaacaa gtcacatgta ccacaggttc ctgaataatt cctgcagggc 3120
tggtgacaga cataacagct ctggttttat aatatcttgg gtatctctaa ggccaataag 3180

gataacatta tctacccaga gagtttagaa gaaaagtagg agtccaaagg aagagtaaac 3240
 aagaatggag ctgtgttcac actgaatttg ggggtcaatct atttccccca ccctctctcc 3300
 tccccaaacc ttcaggaacc ctttagttta ttaatcttat acagaagaaa ctaacttaga 3360
 aacaaaggat tcaatatttg cttattttatt ctttggttaac atgagagtcc catgtctgaa 3420
 aaccaaagtc caatttctgt ctggcctttt gtctcatcct tcttggcaaa agtagctttt 3480
 gaactgatat aaaaaaaaaat gctgagtaac agaaaagtat taatgtgctt gacaccatga 3540
 ctgaaatact atgatcttgt ttgtcaataa aaagcagcta tctgtgaacc aggtaactgt 3600
 gtgttttgga agatctgttt attaacagta aataaataag ccctgtacag aacacaggca 3660
 ctaggttgac 3670

<210> 380

<211> 4138

<212> DNA

<213> Homo sapiens

<400> 380

gcgggcgagg atggcggcgg agaacgaggc cagccaggag agcgccttgg gcgcctactc 60
 gccagtggac tacatgagca tcaccagctt cccgcggctg cccgaggacg agccggcgcc 120
 cgcgggccccg ctgagggggcc gcaaggacga ggacgccttt ctgggagacc ccgacaccga 180
 cccggactcc ttctgaagt ctgcacggct gcagcggctg ccatcgctgt cgtcggagat 240
 gggcagccaa gacgggtcgc cgctacgcga gacgcgcaaa gacccttct cgcgcgcagc 300
 ggccgagtgc tcctgccgcc aggatgggct cacggtcac gtcacggcct gtctcacctt 360
 cgctaccggt gtcaccgtgg cgctgggtcat gcagatctac ttcggggacc cccaggtgag 420
 ggggacaaat ggggaggggg aggaaactgg ggagtgggga gtggggtaat gtttgaggaa 480
 ctgtggaaac tggggaatgg ctgagtggta gaaggggaga gagggtggtg acttgggaga 540
 ggaagggtccc aaagagagga gctccagggc atgagggaga cagaacaagg aagaataagg 600
 acagatccat taggaggcac ttggggtaat gagggcagag tcaaggcaac aagggggcag 660
 ggcttcgacc ttcatgccgc gtagagttct agggctagtg gaggtgccct agggaggtgg 720

acagctcctc ctgccccac caagtcctct tccccctccc agatcttcca gcagggtgcc 780
gtggtgaccg atgctgcccg ctgcacttca ctgggcatcg aggtgctcag taaacaggga 840
tcttctgtgg acgcagcggg ggcagcagcc ttgtgtttgg gtatcgtggc tccacacagt 900
tctggcctgg gcggtggggg cgtgatgctg gtacatgaca tccgacgaaa tgagagccac 960
ctaattgatt tccgggagtc cgcaccaggg gccctcaggg aagagaccct gcaaagatcc 1020
tgggagacca aggtggggac cctggtgaga agagagagtt caggggagtc tctcttcatt 1080
gcccttctgc taaccaagc attaatgtgc taagtattta ccaggggagt gggaaaaaga 1140
gttgagcagg attctcttag gctatgagag agtcaggcag cccccaagat aaaataatga 1200
actagaaaat ctggaacctt acttctctgg gaatcttacc tatctggcac gtgggaagga 1260
agaaaaaagg ctactgagta ccctgaaatg tcacgaagtt gatgcaatga aactcacaca 1320
tctcactctg agccagttga ctataacttt cccagccctt gatataattgg aagattagag 1380
gggaattgcc agaagtaaac caactgtctg ctgaaagaaa aagaagatat cgaataactt 1440
ggaaaaatgg gtacttagtg cgggtggcaaa agccaaacac acccctgagt cttcagagct 1500
cagagtaatg gtggggtgaa actgaatagg ttaaataag gtcctttgtc caccgtttta 1560
aaaggtaggg ttgcctgggc acagtggctc acacctgtaa tcccaacact ctgggaagcc 1620
aaggcaggag gattgcttga ggccaggagt tcgagaccag cctgagtgc atagtgcagc 1680
tttgtctcta caaaaaatgc ttgaaatta gccaggcaca gtagcatgca ccaaggatcg 1740
cttgacttga gcccaggagt tggaggccac agtgagctat gactatgcca ctgtactcca 1800
gcctgggtaa caggaaaaaa aaaaaaaaaa aaaaaaaagg caggggttgg tgaaatccaa 1860
tgtagacagg tgtctttcta cactggttat gtcctggctc ttaaaagagt tttgcttaat 1920
ttataaatcc cccaactacg gcagctaaaa gaggccttcc tgcatttgct gataggaagt 1980
cagggagatg ggaggggtgc ctgcttggga aagcttgctc ctcccctggg atacttggcc 2040
tgtgtctctc ccctgtgcca gccatccctg gcttggggct ctgcggagtt cagcccagca 2100
cccccttcc agtgacctgg tctcctctct ccctcgcta cccgccttgc ccagcctggg 2160
ctcttggtgg ggggttcccgg aatggtgaag gggctacatg aagctcacca gctctatggc 2220
aghtaacaac cctccccctg gggaccaggg acccccgttt gcctctctcc ttgggtggcc 2280
ttctcctact tccctggatt ctctcttccc caactcccc tcctaataat cccttccctt 2340
gccaggactc tccttcccag gaacccccct cccccggac ccctcctcat tccccagga 2400
cctcctccac ccctgctct cgggcccccc caggctgcca tgggtccaag tcctggcctt 2460

tgcagcagct gtggcccaag atggcttcaa cgtgactcat gatctaggtc agtggggcct 2520
ggggatttgg gagagacatg aggttgatgg agaagggtag aatctttgag atttgagacc 2580
caagccagag aggccctctc ttccagtttg ctccctcagac cccctcccca ctttatccca 2640
ccctcacctg gaggcggcct caaacgaggg ggtctgggaa gggcccttag acatccctgc 2700
ctcgactta acaggctcct gggggtcagg gcacttaggg tgggccactc agcccccatc 2760
taccatctt attgcgcgtc tcatccggtc cagtcctggc gtcccgccct gccagcctc 2820
ccgtccctgc ccctagcccc tgccctggct gaacagctgc cacccaacat gtccgagcgc 2880
ttccgggaga cgttccctgcc atcggggccgc ccgccactac ctggctcggt gctgcatcgg 2940
cccgcactgg ctgaggtgct ggatgtactt ggcaacctcc gcccggtgc cttctacgca 3000
ggtggcaacc tcacactgga gatggtggcc gaggctcagc acgcaggggg tgtcataacc 3060
gaagaggact tcagcaatta cagcgccctt gtggagaagc ctgtgtgtgg cgtgtacaga 3120
ggtgacctct cccccggctc ccagggtccc ccctcaggag aagcctccca gtccatggcc 3180
acatcgtttt ggcctagaga ctctcttcca ttccacagga gagaaactaa ggcagtgagc 3240
tacctgggca gtcaactgtt gaagcaaacc agagtcagcc caccttctga aaagtagctg 3300
tggggtcagt taccccaagt atttaggata ttgggggggtg gacctgggtc aagggtccaa 3360
cctggaagtt ggggttcttg ccataggttt tcttgatttg ggctctgtgt tgcctctgcc 3420
ctttccccag cagcgctgtc actgccctgt acttcctaag aatttttaag acaaagtcca 3480
tccaagcttc acagtagaat gaacctttca agacagtcac agaccagct cctcatagt 3540
ccaaaaagaa attgaggccc gagggaggaa tataacaact ggccaaactc aagaaaacca 3600
acagggaacc cagaaaacca agcttatgac atgggtgggg tccatgttta ctgaacccaa 3660
ggtggttaggt gctggatttc tcagaagatt ctgagttctt ttcccttcta ggagagccag 3720
atcacatcaa gccccaggaa agggtttctc tgagttcaac tttccaggcc tcaatctcca 3780
acctgattcc tctgccagag gcagtggaat atgaagcaat ggaaagagcc tatcagctgg 3840
gtgcagtggc tcaggcctat aaccccagca cattgggagg ctgaggcagg aggatcactt 3900
gagcccagga gttcatgacc agcctgggca acatagttag acaccgtctc tataaaaaat 3960
ttaaaaaatta cccaggcgtg gtgggtgtacc tatagtccta gctactcagg aggttgagat 4020
gggaggattg cttgagcctg ggaggtcaag gctgcagtaa gcatgattgt gccactgcac 4080
tacagcctgg gtgacagagt gagaccatta tcacacacac acacacacac acacacag 4138

<210> 381

<211> 3835

<212> DNA

<213> Homo sapiens

<400> 381

cagggagagg	tggattgcag	gctgtgcctg	gcattcttcc	ttcccgatgc	tgcttgcctt	60
tgggattggt	ggtgtctttg	tgagaccaga	gactgggtggg	gtagaaggga	gaaggatcaa	120
gactcagtgt	ttttcagggc	ttgaaaaatg	gagaacattc	cagatggagt	gaatagcatg	180
agcaggggtc	ttaagagcag	catatacagg	ctatgtttgt	ggtttggtga	gcagcctgtg	240
tgtgcacatg	catggggttt	acagagtga	ttagtagaga	gcaagagtaa	agacatagat	300
ggaccagat	cttcatggat	ctggctgagg	agcctgggct	tggttggtga	tgagcctgtg	360
agccatcaat	ggttttggag	caggaggaaa	ggtggtcaga	actcagtggg	aagcagaatg	420
aaggaacaga	taagaggcct	gaggactccc	tacaagacat	accctaata	gagtataagg	480
acctgagagg	aaagagtggg	caagcagaaa	tgtctgaaat	catcaggcag	ataactaagg	540
gcttcctcac	ttctttaagg	atttccttgc	tgatcccagt	agccacagag	tctcacattc	600
ttttgtccct	ggcaggggtg	tgctggctag	tgaggtgtgg	tctgagaccc	accaggagga	660
agtgggggagc	tgggggggaa	agctctatag	cacttgaccc	taggctatca	ggaagggtgg	720
tcctggatgt	cagagagatc	gcctggcagg	tgagcaggcc	tggtgtagcc	ccagcagccc	780
gcccctccct	ctgagctgag	agtcctgtct	tggtgtgtcc	agatgcacct	caggggtcag	840
ccacttgcgt	ggcccatggc	ctggcctccg	ctcagcctgg	ttgccttcat	ggactgcttt	900
gagaagtagg	tgtgcatgcc	tgctctccct	cgtctgtccc	ttcttaatcc	ctttataact	960
gcacttgtcc	aggaatctgg	gctgagtgag	gtggagatga	ataattaatg	tcaggcgctt	1020
cagacaccaa	atatttgaac	agctgcctgg	tgtttttgct	ggcaaggacc	tagcggccaa	1080
aatcaggatg	ttggccgggg	gtcccactct	gtggctctga	ttggccttag	ccagcctgtt	1140
ctctcctctg	atggacttgt	caggctggat	aatggggcat	aggggaggcc	ccactctttt	1200
cctgtgaaat	tcctagacct	gaatttttct	gtcctcttac	tgttcttctt	agacctggaa	1260
gataggtgga	cagcaggcct	gggctgagtg	tccccgagga	cgtgacataa	tatatgaatg	1320

ggctagttta tgagcagaga ccacttggag cagcatgcag tagcagagaa agatgaggtt 1380
tgcagagtga agggcctgaa atgtcagggt caggggcact gaagtatctg gctctataca 1440
tcccaggccc aggtttccct ctgggcctta tcagggtcaa agcctaacc ctacctggag 1500
gcaacaggag gggcacctt ggccctcgtct tgtccccagg ccctcctcac accctgcttc 1560
ccacaggctc tggtttcatc atgtgcagcg gcaaagagaa cccggacagt gatgctgact 1620
tggatgtgga tggggatgac actctggagt atgggaagcc acaatacaca gaggctgatg 1680
tcatccccctg cacaggcgag gagcctgggtg aagccaagga gagagaggca cttcggggcg 1740
cagtcctaaa tggcggccct cccagcacgc gcatcacacc tgagttctct aaatgggtca 1800
gtgatgagat gccatccacc agcaatggtg aaagcagcaa gcaggaggcc atgcagaaga 1860
cctgcaagaa cagcgacatc gagaaaatca ccgaagattc agctgtgacc acgtttgagg 1920
ctctgaaggc tcgggtcaga gaacttgaac ggcagctatc tcgtggggac cgttacaaat 1980
gcctcatctg catggactcg tactcgatgc ccctaacgtc catccagtgt tggcacgtgc 2040
actgcgagga gtgctggctg cggaccctgg tgagggtggca tgggggtcgg ggaatgggag 2100
gccgctccgg gcaactgcca gatgtctgtg cttatgcctg agcctgcctg ggggaagtgg 2160
ggagcatggc gcaaaggaga acagagccag gagccaggat atttaccgc aggatattta 2220
ccccaggct cgctgcctct cctccccaac tgcaggttta ggaacttctc cccctccatg 2280
agttcactgc attctccctt cccgccccg gtccccgaag gccactgca tcacacagac 2340
tggtagggcc tggggtcagg aggaggctgg ctgtaggtaa acaggaccag ggccttggcc 2400
cctccccctc ccattactaa gtcctttctg ctctgcccc tgttcttcgc tcaggagcag 2460
ccattaaaat gtcgcccgga gacagtaata aaaggctcgg acgtgggctc tgtgtcctga 2520
tcaaaggccg cgtgtaatct cgttagggtc gcggctgcca cagctggacc cagccttggt 2580
ctcattactg gggctcctgc tgcggggctg gccaggcgggt ttgatcctgg cgtccccca 2640
acacaggagc gtgcctgcct gctcacagaa gctgcctatg cgtccccagc ctgggctgac 2700
aggaccaagg tctcagcaca cactggtgca gagagacatg gctgcaggcc cagggtgctca 2760
catgcgca ca catggctcat tgtgtagacc agagccctcc ctgttctccc tgcagggtgc 2820
caagaagctc tgccctcagt gcaacacgat cacagcgcgc ggagacctgc ggaggatcta 2880
cttgtgagct atctgcccc ggcaggcctc gcctccagca gcccacctg ccccgacct 2940
ctgtgacagt gaccgtctcc ctttgtacat acttgcacac aggttcccc tgtacataca 3000
tgcacatact caaacatgcg tacacacaca cacatttaca cacgcaggac tctggagcca 3060

gagtagaggc tgtggcccag gcactacctg ctggctccca cctatggttt gggggccata 3120
 cctgttccag ctctgttccc aggggtggggc agggaggtgg gggttggggg agtagtgggg 3180
 cacggctcct aagatccagc ccccatactg acagacggac agacagacat gcaaacacca 3240
 gactgaagca catgtaatat agaccgtgta tgtttacaat gttgtgtata aatgggacaa 3300
 ctccctgccc tctacctgtc ccctccccct ttggttgtat gattttcttc tttttaaga 3360
 acccctggaa gcagtgcctc cttcagggtt ggctggggagc tcggcccatc cacctcttgg 3420
 ggtatctgcc tctctctctc ctgtggtgtc ccttccctct cccatgtgct cgggtgttcag 3480
 tgggtgtatat ttcttctccc agacatgggg cacacgcccc aagggacatg atcctctcct 3540
 tagtcttagc tcatggggct ctttataagg agttgggggg tagaggcagg aaatgggaac 3600
 cgagctgaag cataggctga gttagggggc tagaggacag tgctcctggc caccagcct 3660
 ctgctgagaa ccattcctgg gattagagct gcctttccca gggaaaaagt gtcgtctccc 3720
 cgaccctccc gtgggcccta tgggtgtgatg ctgtgtctgt atattctata caaaggtact 3780
 tgcctttcc ctttgtaaac tacatttgac atggattaaa ccagtataaa cagtt 3835

<210> 382

<211> 1927

<212> DNA

<213> Homo sapiens

<400> 382

gtgaggagcg atataaacgg gcgcagaggc cggctgcccg cccagttgtt acttaggtgc 60
 gctagcctgc ggagcccgtc cgtgctgttc tgcggcaagg cctttcccag tgtccccacg 120
 cggaaggcaa ctgcctgaga ggcgcggcgt cgcaccgccc agagctgagg aagccggcgc 180
 cagttcgcgg ggctccgggc cgccactcag agctatgagc tacggccgcc cccctcccga 240
 tgtggagggt atgacctccc tcaagggtgga caacctgacc taccgcacct cgcccgacac 300
 gctgaggcgc gtcttcgaga agtacgggcg cgtcggcgac gtgtacatcc cgcgggatcg 360
 ctacaccaag gagtcccgcg gcttcgcctt cgttcgcttt cacgacaagc gcgacgtga 420
 ggacgctatg gatgccatgg acggggccgt gctggacggc cgcgagctgc gggtgcaaat 480

ggccgcgtac ggccgcccc cggactcaca ccacagccgc cggggaccgc caccgccag 540
 gtacgggggc ggtggctacg gacgccggag ccgcagccct aggcggcgctc gccgcagccg 600
 atccccggagt cggagccgtt ccaggtctcg cagccgatct cgctacagcc gctcgaagtc 660
 tcggtcccg actcgttctc gatctcggtc gacctccaag tccagatccg cacgaaggtc 720
 caagtccaag tcctcgtcgg tctccagatc tcgttcgcgg tccaggtccc ggtctcggtc 780
 caggagtcct cccccagtgt ccaaaaggga atccaaatcc aggtcgcgat cgaagagtcc 840
 ccccaagtct cctgaagagg aaggagcggg gtcctcttaa gaaaatgatg tatcggcaag 900
 cagtgtaaac ggaggacttg gggaaaaagg accacatagt ccatcgaaga agagtccttg 960
 gaacaagcaa ctggctattg aaaaggttat tttgtaacat ttgtctaact ttttacttgt 1020
 ttaagctttg cctcagttgg caaacttcat tttatgtgcc attttgttgc tgttattcaa 1080
 atttcttgta atttagtgag gtgaacgact tcagatttca ttattggatt tggatatttg 1140
 aggtaaaatt tcattttgtt atatagtgt gacttttttt gtttgaaatt aaacagattg 1200
 gtaacctaat ttgtggcctc ctgactttta aggaaaacgt gtgcagccat tacacacagc 1260
 ctaaagctgt caagagattg actcggcatt gccttcattc cttaaaatta aaaacctaca 1320
 aaagttgggtg taaatttgta tatgttattt accttcagat ctaaattggta atctgaaccc 1380
 aaatttgat aaagactttt caggtgaaaa gacttgattt tttgaaagga ttgtttatca 1440
 aacacaattc taatctcttc tcttatgtat ttttgtgcac taggcgcagt tgtgtagcag 1500
 ttgagtaatg ctggttagct gttaagggtgg cgtgttgcag tgcagagtgc ttggctgttt 1560
 cctgttttct cccgattgct cctgtgtaaa gatgccttgt cgtgcagaaa caaatggctg 1620
 tccagtttat taaaatgcct gacaactgca cttccagtca cccgggcctt gcatataaat 1680
 aacggagcat acagtgagca catctagctg atgataaata cacccttttt tccctcttcc 1740
 ccctaaaaat ggtaaatctg atcatatcta catgtatgaa cctaacaatgg aaaatgttaa 1800
 ggaagcaaat ggttgtaact ttgtaagtac ttataacatg gtgtatcttt ttgcttatga 1860
 atattctgta ttataacat tgtttctgta gtttaattaa aacattttct tgggtgttagc 1920
 ttttctc 1927

<210> 383

<211> 1954

<212> DNA

<213> Homo sapiens

<400> 383

gaaagaagac	gtccacgctg	ctgagtgaga	ccttcctctg	tgctgctgag	tgagaccttc	60
catctgacca	gggggtcatg	ctctcactgc	tcctgcttgg	agttctgggtg	ctgtagcggg	120
tctcggccgc	cccttctgag	ctgggtggag	gaagaagtcc	ctgttgaaat	atcagatgag	180
tagggatgat	cgcctctttt	gaaaacagga	gccgtgaagg	gattcccaga	gaagattgtc	240
atctaacgga	gtcattcgtc	cgcccaggac	ttctctgtca	cagggttacg	tttgggagaa	300
ttttcacagg	ccactgggga	tggctgtggc	tagcctggct	ttccactgat	gccctctatc	360
cctaacctca	gctcctgaca	tggctgtcat	tccagagagt	gcttggaagc	atcctgacta	420
tgttgacgat	ggcctgagcg	gagtttgcaa	tggctctggag	cagccaagga	agcagcagcg	480
ctctgatctc	aatggacctg	ttgacaataa	caacattcca	gagacaaaga	aggtggcatc	540
atttccaagt	tttgtggctg	ttccagggcc	ctgcgaacca	gaagacctca	tcgacgggat	600
catctttgct	gccaattacc	tgggggtccac	ccagctgcta	tcagaacgga	acccttccaa	660
aaacatcaga	atgatgcaag	cgcaggaggc	cgtcagccgg	gtcaagaatt	ctgagggggga	720
tgcccagacg	ctgacggaag	tggacctctt	catttccacc	cagaggatca	aggtttttaa	780
tgcagacacg	caggaaacca	tgatggacca	cgccttgcgt	accatctcct	acatcgccga	840
cattgggaac	attgtagtgc	tgatggccag	acgccgcatg	ccccggtcag	cctctcagga	900
ctgcatcgag	accacgcccg	gggcccagga	aggcaagaag	cagtataaga	tgatctgcca	960
tgtgttcgag	tcggaggatg	taagtaagcc	cttgccaggg	cactcccctc	ccaaagttca	1020
cagcccaggg	cggctccagg	atccaggcgc	tgtggaaacc	accctcaggt	ggaaagcctc	1080
catgctgtta	ctgatgtttc	cagtggatca	gtgatctttt	gcatactctt	tgggttttga	1140
aagatagtga	atacagtttt	attctacttc	ttgaaatagg	ttcttcagga	gctgtttata	1200
aattgagttg	tggttaaata	tatgagggag	ctatttgaag	aatccctttt	acaaaacatt	1260
ttctctacta	aaaatgaagt	taatctttgc	ataacttttg	ttattaaaat	gcaaattttc	1320
gcatggccct	ggcatgctgt	ataaagaaag	cacatctgca	catgaggctt	agttctgcct	1380
ttgcgtgtgg	tcttcagagg	aagtaaaaag	tgattctgaa	gtataagata	ccaaagactc	1440
aggaaaagat	cacaagccct	ttggctccct	ccttggctgg	agaagagtgt	tgtttttagc	1500

ctggaggggg acagaggggc tgaggaagga gcagcagggc caagagggga gctcagagag 1560
 gaactgtcct tcctggaggc tgatcttact cacagaccag cagggggcgc tgctggtgag 1620
 ccagttttgt ggctgttgcc agagtgaat tttaaaatat gatctatggc tgggcacggt 1680
 agctcatgcc tgtaatccca acacttttgg gaggctgagg tgcgtggatc acctgaggtc 1740
 aggagttaa aaccagcctg gccaacattg cgaaacccta gtcttacta aagatacaaa 1800
 aaaattagcc aagcttggtg gtgcgtgcct gtaatcccag ctacgtggga ggctgaggca 1860
 ggagaattgc ttgaacctgg gaggcggaga ttgcagtgag ctgagatcgt gccattgcac 1920
 tccagcctgg gtgacaagag tgaaactccg tctc 1954

<210> 384

<211> 2059

<212> DNA

<213> Homo sapiens

<400> 384

cagctgctcg gaggtcttgg catgatgcc cctccaggga tccccccacc ctttctctcg 60
 atggggctac ccccatgag tcagagacca ccagctatcc ccccatgcc acctggcatc 120
 ctgcccccaa tgcttcacc aatgggggcg ccaccaccac tcacacagat accaggaatg 180
 gtacctcca tgatgccagg aatgctgatg ccagcgggtc ctgtcaccgc agcggtaagc 240
 actaggggcc agcaggtagc aggctctgcc ctgcagtccc gtgagtctga cttggaatgc 300
 aggactatga cctccattct ttccctcttc tcatcgcac caccaggtc cccggcagca 360
 ctccccacac tcaaactctt ctgccagcc atgtactcag ctcttctagt tcccactca 420
 tccccaaagg catatacatt ctcttggttac tcacgtgcct tgtccagctc ccttaaggag 480
 cacacttatc ctcacagagc cacacactgt ggacacatga atatagttct tcacatcctc 540
 tttgtcccca gaagagtcag tagcacctgg ggatcttgct gtgccttctt atgctatcgc 600
 tcagtgtagc agagtctggg taggatatag aatttggcat ccaactgtgaa ggaatgagcc 660
 tcgggagttg tctcaacaaa atactctcac ttgaggagaa cgaagaatgg agctgctatg 720
 cgattctccc ttgggatccc agagctatgg ccctgaaggg tgggggaagc ctgttaggga 780

gcagagatct ctaggagcag gacacatgga ttctggcctg gcctgcttct ccatcccca 840
tggcctgggt cctgggggcc actgggcttg gcccacccc ttccccctcc tctttcttcg 900
gcagacggct ccgggtgcgg acaccgccag ctgtgagtct tctgggggcc tgctccccc 960
aggctcggag gttggggggc ataggggaga ggggaccgtg gactggagcc caccctggat 1020
catgcctgtt gggatgccaa ggagtctggg atattgatgg gaccagggga ctatttactg 1080
gggctggaat acgggaggca taggtgggaa taagatggag gtcggagcaa ggacttagta 1140
tgtatccttt ggcttttttc tagctgctgt ggctgggaca ggccctccga gggccctatg 1200
gagtgagcat gtggccccag atgggcgcac ctactactac aatgctgacg acaagcagtc 1260
cgtgtgggag aagcccagcg tgctcaagtc caaggcagag ctgctcctgt cccaatgtcc 1320
ctggaaagag tacaagtcgg acacaggcaa accttattac tataacaacc agagtaaaga 1380
gtcccgctgg acccggccca aggatctgga tgacctagag gttctagtca aacaagaggc 1440
tgcagggaaa cagcagcagc agctgccaca gacattcag ccacagccac ctcagccaca 1500
gcctgacccc ccacctgtgc ctcttgcccc caccacagtg cccacaggcc tcctggaacc 1560
tgagccaggt gggagtgaag attgtgatgt gttggaggcc acccagcccc tggaacaggg 1620
gttcctgcag cagctggagg agggccccag cagttctgga cagcatcagc cacagcagga 1680
ggaggaggaa tcaaagccag aaccagagag gtctggcctc agttggagca accgggagaa 1740
ggcaaagcag gcattcaagg aactgctgag ggacaaggct gtcccccca atgcctcatg 1800
ggaacaggcc atgaagatgg tggtcaccga cccccgttac aggtaggcct gggcagaggg 1860
agccaggccc tggtcatgag agcagctgtg ctagggactc cctaaaaaac cccagctcaa 1920
cactcagccc taagggaacc agagtcagga cagtgataga ttgggttggg gtgcaagggg 1980
aagaaaagct ggagggcctc caggagaagg aaaggaaagg tatctgacac aacacgttca 2040
ataaatgctt cctgaattg 2059

<210> 385

<211> 2310

<212> DNA

<213> Homo sapiens

<400> 385

atgccggaaa tgcggctctg tttgagacag tactcaccat catggatata cgctctgcag 60
ctggcctacg ggttctagct gtcaacattc ttggctcgctt cctactcaac agtgacagga 120
acattaggta tgtagccctg acatcactgc ttcgactggg gcagtctgat cacagtgcctg 180
tgcagcggca tcggccact gtgggtggaat gtctacggga aactgatgcc tccctcagcc 240
ggagagccct ggaactaagc ctggctctgg taaatagctt caatgtgcga gccatgatgc 300
aagagctgca ggcctttctg gagtcctgcc ctctgacct acgggctgac tgtgcctcag 360
gcatcctgct ggctgcagag agacaccatc ctgcatgtgc tgacaacggc gggcacccat 420
gtgcgggatg atgcagtggc caacctgacc cagctgattg gggggggcca ggagctacat 480
gcctactctg tgcgccgcct ctacaatgcc ctggcagaag acatttcca ggtcacagct 540
gcttacacag tgcagaagac atctgagcac agagccctgt ttttaagaac atctgggctt 600
ttgtcctgac tctggtacct cctggttatg taactacaga tgactaactt cccttatgct 660
ccatgtaccc tgactgcctc ttagagctgc cttgagatta aagctcttgt gtttatgagg 720
ttttattatt accttgaatg ctgaatgaat taacagatgc cagccagtat ctatagcccc 780
cttttccatc ttaattaaat aggggtgggca gaaagcatca tccaccctt ccacaaggga 840
gggaccctct cacatttcca tctgttttg ttaggccatg tagttctgat gcttggccac 900
cagagggcag tgggagccag gtaacaaact tccctttccc cactcctcca acccccacc 960
atctctgcac tgcctaaagg gatattgcca ggtctggaag tgaggagggg acctcagaca 1020
ctggcccagc agtgtttctt tctctctctc tctctctttt ttttttaaaa tagagatggg 1080
gggggtctcg ctttgttgcc caggctgggc ttgaactcct ggtctcaagc aatcctcccg 1140
cctcagcctc ccaatgcgct gggattacag gcttgagcca ccatgcctgg ccagcccagc 1200
agtttcttat cccatgtagc aaccactggg gcagggtggc gcctggtgca ttggggagta 1260
tggggacctc ctgctggcag ggaactgcga ggagattgag ccccttcagg tggacgaaga 1320
ggaagtgcctg gcattgctgg aaaagggtgct gcagtcctac atgtccctgc cagccactcg 1380
aggatatgcc ctcacagccc tcatgaagct cagcactcgc ctctgtgggg acaacaatgg 1440
cacactgcca tagccactta catactacac tggcccagcc gcacccgcca ggtggtgtcc 1500
atctacggga gctgcttgga cgtggagctg cagcagcggg ctgtggagta tgacacactc 1560
ttccggaaat acgaccacat gagggctgcc atcctggaaa aaatgcctct tgtggagcga 1620
gatggccctc aggctgatga ggaagcaaag gaaagcaaag aagcagccca gctttcagaa 1680

gcagccccag tgccacaga gccccaggcc tcacagctcc tggatctgct agatctcctg 1740
gatggggcctt ctggggatgt ccagctccca tcccagatct caaagtgttt gagcgtgagg 1800
gagtacagct gaatctgtct ttcattcgac cccctgaaaa ccctgcttta ctgttaatca 1860
ccatcactgc caccaacttc tcagagggtg atgtcaccca tttcatctgc caggctgctg 1920
tgcccaagag tctccagctg cagctgcagg cccccagtgg gaacacagtt ccagctcggg 1980
gtggccttcc tatcaccag ctcttcagaa tcctcaatcc taacaaggcc cccctgcggc 2040
taaagctgcg cctcacctac gaccactttc accagtcggt gcaggagatc tttgaggtga 2100
acaacttgcc tgtggaatcg tggcagtaac tgtctccact cacagcctga aattctcctg 2160
tgtcccaaac cccagggggc cccagcagct tcgaacctac acctgagggc taccagcagg 2220
tggcgctctg gctttgact gcaaaaactg gggaccagcc cccttctccc acaataaag 2280
ccaataaag cctgagaagt gaggaagcc 2310

<210> 386

<211> 2011

<212> DNA

<213> Homo sapiens

<400> 386

tgttggccta ctggtctgaa cagccaccca ggcgcgctct gcctgagtct cgggctgtgc 60
tagaggcgcc tctggccatg gtcctctcac ggctgggctt cctggcccc gcgctggtgg 120
gtggggttcg ggtgctcttg agctggagag cagagggcct ctgcatgttg gggtagacct 180
gccagcaaga caggagtagc cttctgtggc ctgagaagcg cctccccact ctctgtttgg 240
aagcgagttg caggccccgc ctgctcctgg ggggtgggggg cacagctgac ttcaggagcc 300
cagcttgagc cacctctcac agcggccttg gtgagggggg gcttacctgt ggggggctca 360
cctgtggggg gctcacctgt ggaggggcat cccagactt gggagtgggt ggcatatggg 420
ccagggtcag ggcgttaggg cttggagaaa ggtaggggtt ggggttgggg ttagagccac 480
ggtgatggtc agggcatatg ggctagggtt agggcgttgg ggtcagggcc atgggttctg 540
gctagcactg tggagacagc cgtttctatc acgaagcgat ggaagattct gccgttccaa 600


```

ccccagattc gagggaggca ggggtgtgga cggtgccaca cctcaatcct cacagcctct 660
gtctcccact gcccaggctg gcgaagaagt cctggtttgg gaacttcata agcctggaga 720
aggaggagca gatcttcgtg gtcataaag acaaacctct gagctccatc aaggctgaca 780
tcgtgcacgc cttcctgtcg attcccagtc tcagccacag cgtcatctcc caaacgagct 840
tccgggccga gtacaaggcc acgggggggc cagccgtgtt ccagaagccg gtcaagttcc 900
aggttgatat cacctacacg gaggggtgggg aggcgcagaa agagaacggc atctactccg 960
tcaccttcac cctgctctca ggccccagcc gtcgcttcaa gaggggtggtg gagaccatcc 1020
aggcccagct gctgagcaca cagcaccgc ctgcggccca gcacttgtca gaaccccccc 1080
caccagcgcc aggactaagc tggggtgctg ggcttaaggg ccagaaggtg gccaccagct 1140
acgagagtag cctctgacgc tggcagacac cactaactgt atggaaatga tgacggggcg 1200
gctttccaaa tgtggaatta tccgaaaag ttaacatgtc acctccacga ggccatcctc 1260
tgtgaccgaa ggcagctgct gcggaccgc cctccctccg ctctgctgt tgctgccggg 1320
cagtgaggcc cagcccagcg ccccgccac cccgcggcag ctctcgcct cagctccgca 1380
cggcccgtgg gaggaaggcc aggctcgggg gagcctcctc cagcccggcc gaccggact 1440
cccggtcacc tgaccctca gcaagaacag cctgcctggt ggccttctgg ggccaggacc 1500
cccgggtggc aacgtagcca caggaacagg ccccgccac cgcctccacg ccgcacctgg 1560
aggcctcctc gcaggcccgt gcccgcctc cctggccgcg ccgcctccgt gtagtcttgg 1620
cctcctcagg ctgcctccg tcctctcgtc tcaccgcgc ctcccttgcc tcctctgggg 1680
cggctgtggg ctctggcgct cctctctggc tgagggtgga acagagacac cctgtggcac 1740
cagagccttc ccagcaggcc aggccgctgg gctgggatca gtgttattta ttgcccgttt 1800
taatttatgg attctccgca cctctgttca gggaaggcg gcggccacat cccctgccgt 1860
ctgcgcgtct caggcagtgg gggggctggg gccaggcggc cctctgagga cagagctggt 1920
ggggcgcggg ggggctggcg agctactgta aactttaag aattcctgca agatattttt 1980
ataaaaaaaaa aaaaaaaaaa ggccacatgt g 2011

```

<210> 387

<211> 2914

<212> DNA

<213> Homo sapiens

<400> 387

tttctgtatc	tattaagatg	atgcgttttt	tatcttttat	tctgttgatg	tagtgtatta	60
cattaattga	tggtcagatg	ttaaaacagc	cttgaatttc	tggaatcagt	cccacttcat	120
gttgtataat	ccttttagta	tatcactgaa	tttggttttc	tagtatttcc	tggaggattt	180
tcgcatctat	attcataaag	gatattggac	tgtagttttc	tggtgacatc	tttgtctgat	240
tttggtatct	gggtaatat	ggcctcatag	aatgacttgg	gaagtgttcc	cttctctttt	300
ctggaagaga	ttgtgaagag	ctagtaataa	ttcctcttta	aatgttttgt	agaattaacc	360
agttaatcca	tctgtgcatg	ggctttacta	ctatgtggga	acgtttgttt	atttgtttgt	420
ttgttcgttt	gagacagagt	ctaacgatat	caccaaggt	ggtctcaaac	tccggggctc	480
atgcaatcct	tccgcctcag	cctcccgagt	agctgggaat	acaggcacia	gccatatgcc	540
catgcaccac	gagccaagaa	cccatacttt	gaaggaagtt	ttgtacttac	taatttgata	600
tatttgtttg	taatagtctt	attaagatgt	tatctttctt	tatgagttgg	tttgggtagt	660
tttgtctctt	ctaggaattt	gtctgtttca	ttgagattat	gtaatttgtc	cgcatatggc	720
tgcggatggg	atgcccttat	aatccttttt	ctttctgaag	gtcagaattg	aggtctttat	780
ttcccccttt	tttcttggtc	tttctatcta	atgatttgtc	tattttgttg	atattttcat	840
aggaaaaaat	tggggattca	tatgctttcc	ctatttgttt	tctagtctct	atttcatttc	900
tttccactct	aatccttatt	atttccttcc	ttctgcttgc	tttcaattta	gcttgctctt	960
ctttctttat	tgtcttcaaa	tggaaagttt	gtttattgat	ttgagacatt	tatcctttct	1020
ttaatatagg	catttataac	ataaattggt	cgtaaagtgc	tgttttagct	gcattccata	1080
agttttgcta	tgttgtgctt	tcgttttcat	tcatttcatt	attttcta	tttgctagt	1140
atttttttcc	ttaatgcatt	tattatttag	aagtgtgtta	attccacat	ttgtaaattt	1200
ccttaattta	tttcgattac	tgacttctgt	tgtgggttaga	gaacatactt	cgtatgattt	1260
caattttaaa	tttattatgg	ctcatcttat	ggcccatgag	ggcaacaaac	taaaccatgg	1320
acgagctaga	agtttaacag	agataatcag	gtcaagagac	agctaagaat	gtcccaaatac	1380
atcagtattt	ttatgacttt	tctcatgtat	caccagattg	ctttcaaaaa	ggattgtacc	1440
agcgtacagc	actgctagct	acataataagt	ctactagctt	cactataacc	tctttgtctt	1500
ggctgcttca	cttaatat	ggttttataat	tctgcagagt	aggtttattg	ttcactataa	1560

agttcaaaga cttgggccgg gtgtggtggc tcacgcctgt aatcccagca ctttgggagg 1620
cccaggcggg tggatcatga ggtcaggaga tcaagacat cctggctaac atggtgaaac 1680
cccgtctcta ctaaaaatac aaaaagttag ccgagcatgg tggcaggcgc ctgtggtcct 1740
agctactcgg gaggctgagg caggaggatg gcatgaaccc gggaggcaga gcttgcagtg 1800
agccgagatt gcgccacgcc actgcactcc agcctgggcg acagagcgag actccatctc 1860
aaaaaaaaa aaaaaagttc aaagacttca tcatagaaac agagataact tttgatttat 1920
gttctttcct ctctcttcc aagtcacctg gaacctctat gactccaagt agtgggtcct 1980
ttcctagtgc atatgatcag cagtcatcta aagatagtcg tcaaggtcaa tggcaacgcc 2040
gaagaaggct ggatggggca ctgaatagag ttccagttgg attttatcag aaagtatgga 2100
aagttttgca gaagtgtcac ggactttctg ttgaagggtt tgtccttctc tcctctacca 2160
ctagagagat gactccaggt gagattaaat tctctgttca tgtggagtct gtcctgaatc 2220
gtgtacctca gccagagtac cgtcagctgc tggttgaagc catccttgtc ctcacatgc 2280
tggcagatat tgaaattcat agcatcggaa gcatcattgc tgtggaaaaa atagtgcata 2340
ttgccaatga cttgttcctt caagaacaga aaacccttgg cgcagatgat accatgttgg 2400
caaaggatcc cgcactctggc atctgtactc ttctgtatga cagtgcaccc agtggcaggt 2460
ttggcaccat gacctacctc tccaaggcag ccgccaccta cgtgcaggag ttcttgcccc 2520
acagcatctg tgccatgcaa tgagggtctt gggttcctggc ttctgggagc cttttgacag 2580
ctggtccttg cctcggttgg ttgtgcatgg aactaaaatg ttattgccta atcactccaa 2640
ccctgccccct ttctgtccca tccttcccaa gaagagagaa ctttttcgat aaactaacta 2700
ctgtagaaga agtgaacact tacctggagg ctcaccttgc agaaccagtg acaatcttat 2760
gagtataatg aacactcagc caggcctgtc atgattggct ttatttcttt catcattcat 2820
aaaagtttgc atgtgttttt attctctaga tctgttacca atatagtttt ctaactcctg 2880
tttggggagc aagtgttaat aataacttat tcct 2914

<210> 388

<211> 2519

<212> DNA

<213> Homo sapiens

<400> 388

caagaattat	catcaagagc	agcaggtttt	ataagataca	tggacctatt	tggcattttac	60
cagcccctgc	cgctaggata	gagggacagg	gctgggcccc	aagtgtgggc	ttcccggaag	120
agccaagcac	cggctgctca	tatgggatgg	gtgggggtgg	tgcaggtgcc	ctgcatgggt	180
tccactgccc	taaagagggt	acaaaggcca	cacctccgtg	tgtctgccag	ggctgggttc	240
agagcctccc	tggcttcctg	ggcactctgc	ctatcacaca	gcgattccaa	tatgatcaca	300
tgttcagaac	agccacactt	gtcaaagcaa	ggagagaaca	cttcagcaac	gttcaaaaac	360
atgtctccag	ggattaaaaa	aaaaacacgg	aaagcttcat	tttctccct	agtggggaag	420
tcttccttac	tcacagcctc	ttcctgagtt	ggtgtctgtc	gtgaagcatt	ctttggaagc	480
atagtaagcg	gagggtttaa	tttaccatag	tcgtacacat	ttgcacagaa	tctaaagttt	540
gcagtgcgtt	tcatcatctt	tatgtgaatc	tcatgcagct	cttacaggga	aaacaggaag	600
aactggcccc	attttctaaa	tgtggagaca	ggaggagggtg	agatggctcg	cctctgcccc	660
gccgactggg	aatgcagag	ctcagagaga	cagcaagtca	ggagatgttg	atccagggag	720
cttttcactc	tgccaccac	cccatcgatg	gaagcaccga	cattatcaag	gctgcattta	780
gatttcaaaa	caaaagcaag	caaacatgcc	gggctcgtgg	tatgctgttg	ttttaaccga	840
aatgatacag	ctcaaagggt	gagcagccat	cagtgtctgtg	agcgaagcgt	gatcacacat	900
cttgatgtt	tagcaactca	ggaggtagct	gagcctggaa	gtgactttcc	tggtatgtag	960
caattcagag	aatacaaaac	cacattcatt	atctgaaatg	ggctcagctg	cttctgtgtt	1020
ttatcatata	gagctgggaa	ctttgatgtg	tgtggtgtgt	gcgtgttttg	ctgcatatac	1080
agataatcac	acaactggag	gcttcagcct	tgctgtttac	acacacacac	acacacacac	1140
acaccccagc	agatacatca	cacacagact	tctcacctgt	tacgttacta	acagtgggtgc	1200
tggtttgttt	gaacagtgtt	tgaacttate	aataaccttc	ctccagaagg	ctcagcatag	1260
ctatagcata	tgctgtgtgt	ggaaaatata	acctaagaaa	cagaatggaa	ttgaatcatg	1320
accactattg	ctatgagaca	gaatccacag	cgatggagtg	ggtgctgggg	tcagactgcc	1380
tgagtgtgta	ccctaggtga	gtcacataat	agctgggtga	atggccaagt	tttcaccttt	1440
tttccctcat	ttggaaaatg	ggatgataat	aggagctatc	ctgaagggtg	atgatgaggg	1500
ttaaattaac	aatataggta	aaggcttaga	acagtgtgtg	gcagatggta	ggtaagccct	1560
taataaatat	aaaatatcat	tatttgtgtc	catcatttga	gatatatctc	acatcttate	1620

cagaggactc cccaacact cgtgttgtca ctctctcttc ctgtctctgg gttcctctac 1680
aagtcagttt tgtaccatgc agtctcgcat ttgatgacat gcagcattac ttagttctgt 1740
gaatgattcg tgtgtcttaa tgtcacttcc ccaacagact gtaaatttct tgatggcaag 1800
aaccatgtaa ctggtttttg ttagatttct gcaactcaag acccaatcct gggcaactgt 1860
tggacactta aacatccttc atcactagct gcgttcacat ctaggaaaaa gtaagagaaa 1920
tctgatggta tgggattgta agtgggtatt agatccaaca gctgaaactt aagatgtgaa 1980
gatgtatatt gacacacatg tgcgtacaaa atgtttatag cagctttatt gataatagcc 2040
aaaaaccagg aacaaccgg atgtccttca acaagggaag ggtgaccag cccgtgatgc 2100
atccgtcaca ctgtggattg ctgctcagca acgaggaagc acagactcga tacgggagcc 2160
agcctgggtg acgctccaga gaactaccct gagtggagaa gggcagtccc accgtgtgat 2220
tccattatta tcacattctt gaaatgacag aattatagaa aggagaacag aggagtggct 2280
gccagagttt aaggagggaa tggggaaagg gggaagagca gcatgcggga tccttgtgac 2340
ggaagcgttt tgtgtcgtgt ggggtgtctgt cagtttccta gctgtgatac tgtaccattg 2400
tcttgtaaga tgctgccatc ggtggaaact gggtaaagca tataggggac ctctctgtat 2460
gatttcttac aactgcatgt gaatttacag tgggtctcaa ataaagcatt taattaaac 2519

<210> 389

<211> 2218

<212> DNA

<213> Homo sapiens

<400> 389

aatagcctcc tgtgcagatg aacaacctca catcggaac tacagactgt tgaaaacaat 60
cggcaagggg aattttgcaa aagtaaaatt ggcaagacat atccttacag gcagagaggt 120
aaataccagt tatgcttatt tctgttatga cagttgctct gtttatttcc atgtaagaga 180
aagaaaagaa tatagatata ggccttattt ctttttttta agatggagtc tcaactccgtc 240
accaggctg gagtgcagtg gcatgatctc ggctcactgc aaactctgcc tcccgggttc 300
acaccattct cctgcctcag cctcccagat ggctggcagt acaggtgccc accaccacac 360

ccagctaatt tttttagag acgggggttt accgtgttgg ccgggatggg ctcgatctcc 420
tgaccttggt atccgcccgt ctggcctcc caaagtgtg ggattacggg cgtgagccat 480
agcgctgta atatatagct actatgtatt acatgtatta catgtcaagt tctagccaca 540
taatataaat ttgtaataca tagctgggat tacaggcgca caccaccaca ccacgctaatt 600
tttttttttt tttttgtat tttttagag acgggggttt accatgttgg tcaggctggg 660
ctcgaactcc tgacctgtg atccacctgc cttggcctcc caaagtgtg ggattacagg 720
catgagccac cgtgcccaac ctattttatt ttcaagacag ggccttgccc tgtcaccga 780
gctggagtgc agtggctcaa tcatggctca ctatagcctc gacctcctgg ggtcaggcag 840
ttctcccacc tcggcctctc gagtagctgg gactgcaggc atgcactgcc acaccggct 900
aatgtttaa aaatttttt gtagagacag ggttctcacc gtgttgcca ggctggcttt 960
gaactcctgt gttcaggcag tcctcctgcc tcaacctccc agagtgttgg gattacaggc 1020
atgagccacc atgcctcact aattaagctt tttctttttt tgggggttag gggggtgtcg 1080
ggggttggga cggagtcttg cctgtagcc caggcctgga gtgaagtggc atggtctcgg 1140
ctctctgcaa cctccgcctc ccaggttcaa gcgtttctct tgcctcagcc tcctgagtag 1200
ctgagattac aggcgcacac caccacgcct ggctaattat ttttttttt ttttgtattt 1260
ttagtagagg tggggtttca ccatgttagt caggctgggt tcaaactcct gacctcagg 1320
gatctgccc cctcagcctc ccaaagtgt gggattatag gcatgagcca cactgcact 1380
ccagcctggt gatagtcaa aactccgtct aaaaaaaaaa aaataataat aataataaaa 1440
acaagtccta agaaaaatgc ccaggtgctt tctggcatgg tgatttgcac cacatagaac 1500
taaagacgat gtcagaccaa gcttcttctt tctctctcc ccgcatagga tgaagatttg 1560
ataaagtgga aggcactgtt tgaggaagtc cctgagttac tctgaggc agagaagaag 1620
gaatgggttg agaaactgac tgaagttct atcagctctg atgccttctt ccctttccga 1680
gataacgtag acagagctaa aagggttaagt atggaattgg gtgcatttgc ttagagttga 1740
gcattatgta gaaactgttt cagaaatcct gcttttgatt tttaaaagg gtggcaaaagt 1800
gatacagatc agtaatatc agagaaccat ttgacttctc cattgggtgg atggaaaacc 1860
caaactcctg tgttattttg ctttttgac tgagtgtatc tttgttagca tatgcttttt 1920
agagggggat tttgagtttt gcaggttttt acataagatc gcgttttgaa aatcaatata 1980
cttccccag agtgggtgtg cgtaacattgc ggctccctcc ggttctgctg ctgacaaagt 2040
tgtgattgag gcctgcgacg aactgggaat catcctcgt catacgaacc ttcggctctt 2100

ccaccactga ttttaccaca cactgttttt tggcttgctt atgtgtaggt gaacagtcac 2160
gcctgaaact ttgaggataa ctttttaaaa aaataaaaca gtatctctta atcactgg 2218

<210> 390

<211> 2039

<212> DNA

<213> Homo sapiens

<400> 390

tgagggtcccg ggttcgatcc ccggcatctc caccatattt atttatgaga tggagtctca 60
ctctgtcacc caggctggag tgcagtgggtg caatctccac tgactccagc ctccacctcc 120
caggttcaag caattctctc acctcagcct cccaagtagg tgggattaca ggtgcctgcc 180
accatgcccc actaattttt gtattttcag tagagacagg gtttcacat gttggccagg 240
ctgggtctga actcctgacc tcaaatgac tgcccacctc agcctcccaa aatgctggga 300
ttacaggtgt gagccaccgc gccagcctg agctctgctt tatactcaaa tctttctctt 360
tttttttgag gcagggtctc tgtcaccag gctggagtgc agtggcaca tcacagctca 420
ctgaagcctc agtctcccag gctcaagcga tcctcctgcc tcagcctccc gagtatggga 480
gtacaggcat gtaccacat gcctggctaa tatittgggg gggtttagta aacaaagggt 540
ctcactatat tgcccaagct ggtctggaac tcttgaactc aagcaatcct ccagcctcag 600
tctcccagaa ggctgggatt atagatataa gccactgtgc ccagcctata cttgaatctt 660
taatgttcat cccaaaccct aaaggtagac attaccccca ttttatggaa aaggacactg 720
aggctcagaa aggtgctgtg acccgcccaa ggcccccttg ctagtgagtg caaagccagg 780
actcgaactg tccccagct tctgtctcct cctgggccag gcttcccctg agctcctccc 840
tgccccccagc cctggcctgc agctgcaagg gttattttca tctctcctgt cattccagca 900
aaaccactgg gccagttagt cagtcttgtg gttaagggtg gaagggtact gttgggagcc 960
cgcaatggaa gacgtttctt cagcgggtgg cccccgggcc ctgcagtacc cctgcaccga 1020
gagaagagcc atgttctctt aggctgccc atggctttgg gaagtcagtg ccctggataa 1080
gccaccagcc ttccccacaa aggctcagga gtggcagttg agaagtattc actcccaatt 1140

cacttggacc cccttgtcct ctccaccag gtgtcagcgg tgcccactgt gctggccatg 1200
aagaatgggg acgtggtgga caagtttgtg ggcatcaagg atgaggatca gttggaggcc 1260
ttcctgaaga agctgattgg ctgacaagca gggatgagtc ctggttcctt tgcccgcgtg 1320
ggacccaat agaactcagc ctttccatgc cagcccttcc tgctgcctcc ctctgtctg 1380
gctcctgggg cccatgctta gagcccaggc tccagccctg agtgcttccg agctggcgga 1440
ctgcccaggg gccatcagag gatggtggtg ctgctgctga tccggggacc gctgtcttcc 1500
ctcccatagc cttttcatcc ctcttctag ggccataggc agttctcca ggatgtgtgg 1560
cgagagcctg ggccagcca cagcgttctt agtcaggcag ccacacctg gtcctcatct 1620
tggtccttc caatctgaaa cctcgtgcct ggctcgtctg ccacctacat ttctctttcc 1680
agctgctgtt ttgtaaaaag aaaaagaaaa aagaagccca aactagttag agtaatatct 1740
aattatctca tttttttag gtctgtgata aagaacttag tcatcccttc cacctcctac 1800
tgtgaagaac agaccctggg tcccacactg aaatcccctc tagtcacca tttccacccc 1860
ccaggagct gcctcccagg cagggggtgc agaaaatgat tgatgggctg gggaaccctg 1920
gagagcctcg actccggaag tctcaagggt cctcctcctc tccttagctg gcccgttggt 1980
tttctgagca gggggctgaa ctgtgaacaa gtcagacaaa taaagcaagg gtctgcacc 2039

<210> 391

<211> 2687

<212> DNA

<213> Homo sapiens

<400> 391

gacctagagg ggcgctggcc tggagcagcg ggtcgtctgt gtcctctctc ctctgcgccg 60
cgcccgggga tccgaagggt gcggggctct gaggaggtga cgcgcggggc ctcccgacc 120
ctggccttgc ccgcattctc cctctctccc aggtgtgagc agcctatcgg tcaccatgtc 180
cgcagcctgg atcccggctc tcggcctcgg tgggtgcgcg cccctcacga ccccgcccc 240
ttgctccgct ggggtggaggc tggagccagc cctcacgctt ctctcttcgc agctcccatt 300
gctatcacat gttttaccag aggcttggac atcaggaaag agaaagcaga tgtcctctgc 360

ccagggggct gccctcttga ggaattctct gtgtatggga acatagtata tgcttctgta 420
tcgagcatat gtggggctgc tgtccacagg ggagtaatca gcaactcagg gggacctgta 480
cgagtctata gcctacctgg tcgagaaaac tattcctcag tagatgccaa tggcatccag 540
tctcaaatgc tttctagatg gtctgcttct ttcacagtaa ctaaaggcaa aagtagtaca 600
caggaggcca caggacaagc agtgtccaca gcacatccac caacaggtaa acgactaaag 660
aaaacacccg agaagaaaac tggcaataaa gattgtaaag cagacattgc atttctgatt 720
gatggaagct ttaatatggg gcagcgccga tttaatctac agaagaattt tgttgaaaa 780
gtggctctaa tgttgggaat tggaacagaa ggaccacatg tgggccttgt tcaagccagt 840
gaacatccca aatagaatt ttacttgaaa aactttacat cagccaaaga tgttttgttt 900
gccataaagg aagtaggttt cagagggggg aattccaata caggaaaagc cttgaagcat 960
actgctcaga aattcttcac ggtagatgct ggagtaagaa aagggatccc caaagtgggtg 1020
gtggtattta ttgatggttg gccttctgat gacatcgagg aagcaggcat tgtggccaga 1080
gagtttggtg tcaatgtatt tatagtttct gtggccaagc ctatccctga agaactgggg 1140
atggttcagg atgtcacatt tgttgacaag gctgtctgtc ggaataatgg cttcttctct 1200
taccacatgc ccaactggtt tggcaccaca aaatacgaaa gcctctggta cagaagctgt 1260
gcagtcatga acaaatgatg tgcagcaaga cctgttataa ctcagtgaac attgcctttc 1320
taattgatgg ctccagcagt gttggagata gcaatttccg cctcatgctt gaatttgttt 1380
ccaacatagc caagactttt gaaatctcgg acattggtgc caagatagct gctgtacagt 1440
ttacttatga tcagcgcacg gagttcagtt tctactgacta tagcaccaa gagaatgtcc 1500
tagctgtcat cagaaacatc cgctatatga gtggtggaac agctactggt gatgccattt 1560
cctttactgt tagaaatgtg tttggcccta taaggagag cccaacaag aacttcttag 1620
taattgtcac agatgggcag tcctatgatg atgtccaagg ccctgcagct gctgcacatg 1680
atgcaggaat cactatcttc tctgttggtg tggcttgggc acctctggat gacctgaaag 1740
atatggcttc taaaccgaag gagtctcatg ctttcttcac aagagagttc acaggattag 1800
aaccaattgt ttctgatgtc atcagaggca tttgtagaga tttcttagaa tcccagcaat 1860
aatggtaaca ttttgacaac tgaaagaaaa agtacaaggg gatccagtgt gtaaattgta 1920
ttctcataat actgaaatgc tttagcatag tagaatcaga tacaaaacta ttaagtatgt 1980
caacagccat ttaggcaaat aagcactcct ttaaagccgc tgccttctgg ttacaattta 2040
cagtgtactt tgttaaaaac actgctgagg cttcataatc atggctctta gaaactcagg 2100

aaagaggaga taatgtggat taaaacctta agagtcttaa ccatgcctac taaatgtaca 2160
 gatatgcaaa ttccatagct caataaaaga atctgatact tagaccaaaa gcaacattcg 2220
 ttctctaacc attctgtatt gattatataa gcaaaatgaa aagagaaact taaatgaaca 2280
 cagctcttta acatggttca ggtacacata ttttgaccca agtggatatt ttcttaaaac 2340
 caatcaataa tagctagcta ttactgcaga ctataaaaatc tggatataga aaggagacct 2400
 gtatcaaact gctttttag tagtggtttca taacaactta tgactaaaaa tatcacactg 2460
 aataagagag caggattgcc aggtatTTTT ctatttctct ccttaatttt atatgtatat 2520
 agatatattt ggcttatatt ctaagtcacc taagtactta aaagttaagt tggtaaagta 2580
 ttactgact gcttataaac atttaaagac aaagacattt caaataactg cagaaaaaat 2640
 attgtagttt gaatatttaa gcaataaaac tgctagttag ttattgt 2687

<210> 392

<211> 2090

<212> DNA

<213> Homo sapiens

<400> 392

atttaaacag caggtgatca aatttagtgc atgttagttt gtcaaagctg cattttcaag 60
 ttgtaacaga ttggtgcctt agactatggg atgggcatgg acagaagaaa aatctgatgg 120
 tgaatataag aaaagctgtg aaaaaagaaa tggagaggag tgtggggatg gttaattcac 180
 agagaaggga agccggcctt gcctggagtc agcagccagg agtccagcat tcacattctc 240
 cccagaagga acaaaaggcc acatgtgccc tgttttgcag atgtgccttc cccacgcctc 300
 catggggggcc tttggcccag ttctcattgg cagtgtcact tcctgatact cattttccag 360
 aagcctccca ggtgattagc catcatatgt ctccaagaaa ggaagtgttc ggcacataat 420
 ctgccaatga ttgctgatga caacacaagt gtcagacact gtgttagcaa tgacaaggac 480
 atgggtctctg ctttctagta cgtgaggagt ctggccttga gcctcaccct gaggtgcag 540
 tgtactcaaa gttgtaacag accaggacag agggctgagg gtccaggaga aagggtgccc 600
 agccttgaag agtcaggaga gacatcagta cagttaatac aggctccatg gagtggggag 660

gaacaggagg gacagacagc agcaggaaac tcatctggaa aggtgtgcaa gggtcagagc 720
 acaggctagt ggagagagcc aggaaaaggc atgtgggcct tgaaagcaga cggacccagc 780
 tcatctaattg actggctgta aaaccttagg caaattacat catttctgaa gcttcagagc 840
 ttcttatatg tggattggga gaaactagtt actcacaatt cttccttccc accccacctt 900
 tcccaaggcc cactgtaggc agagaatgct ccctatgctg ttgctgatgg gcttggccct 960
 atgcctcatc tcagccattg gaatatgggt gggagtaaga tggggcagct ccaagccaag 1020
 gccttaagag ccaccacttt cttccttcta gccccactgt gcctctgtat ctgccatgag 1080
 aagggcatgc ctgggagctg ctgggtccaag aacaaggagt cagagaacag ccctgaaatc 1140
 aaccacagc ctgatgcaga gtggcccca cccacagacc tgtgagcaag aaaaataaat 1200
 gtttgttgct gtaggacttg ggggtgcattt gatatgcagc attactgaag cagaaactac 1260
 agaacaaaat gccagcaag gtacctggca caggaagtgc tcaaaggccg gcagcagctt 1320
 ggctggggca gcatgcatga tggaagggca tgggctttag gggtaacag ccacacgacc 1380
 tttgccacat ttcttagcat ctccaagcca gctgcttcac tttcaagtgg agggatgggtg 1440
 aggattaggt gaaagcctgc tgctaaagtg ctcagggtca tacaaggtgc actataggtg 1500
 cttgtctcta tggcagggtc cattattttc ctcttcagc atatgtgcag acccagacac 1560
 cacacagtta agttctgcac taagtggggg ggactgctag tagcaggctg aagacaggaa 1620
 gcccaggaag gagctagcat gagagtcgag gtcagaggtc agaggtcaaa gcatgctggg 1680
 gttggcaggg tgccctgcct ggcctggcag taactctcca ccgggatgcc acctgggaga 1740
 ggggtggagtc cactgcctga gaggcaatag ccagaggcga gggccagatt gtcctgaaac 1800
 acccctacac ttgcagccac tgttaccaaa gggctcagag tattcacaac caaggaggaa 1860
 tatgtgactg aggctgaaag tattgtgtta ttaatcagat acaaaagatt tccctttgtg 1920
 gagacgtacc atagaacagt ggggtcccggg gtggttttct tttgacgagg acacgagcca 1980
 gcagtgtac caggaacagg atgagggcag caaccctac aatagtccag gaactgcaac 2040
 gaccagaaca gggaggtggt cactatcaaa ataaacacat tgggtgcctgg 2090

<210> 393

<211> 2417

<212> DNA

<213> Homo sapiens

<400> 393

actaaactct	ccgggggggc	tcagcgccat	ggggtgggtc	gaagaacat	gatgaaggct	60
ggttcgaatt	gtgatgacca	tttttgtcca	catctcctag	gaccataag	ccagagtttc	120
tctggagctt	atagctagaa	ggggttcttg	gtcctggagt	gcaggcctgt	caactttaca	180
ggagagcact	agattgcttt	ctgaagtggc	tgaaccaggt	tatgcttcca	tcagctgtgt	240
atgagcatcc	ccatcttctt	gaccacactt	gaagccatca	gtttccttga	agcatatggg	300
ttgcacactt	cattttgcat	gtatcaaatt	tatataataa	aaaatgtaag	gaagccatgg	360
aaataaaaac	ataggtgtgc	cttctgtagg	ctgctacgct	cctgtgcacg	agggcgtcta	420
gaactttgcc	ctccatgcac	aagttgcaga	gcacctcat	caggacattt	acgaaggccc	480
tggggtggga	tgggcactgc	ctatgtggcc	ctccccagc	ccagcagtat	gcagtggccc	540
gggtccaatc	aaaggtcgcc	tgggagggtg	agttgcaaga	atctggggaa	aagagcccaa	600
ggtggctgcc	gcctgctaac	agcttgtcta	gacaggcccc	atggggcttc	accgcacatt	660
gcgagagctc	tggccagccc	cctgcccact	tgcaaaagag	gctgttggca	gcaacacttc	720
accactagaa	acctttactc	caattcgaaa	catgccttaa	cgcacagtgt	gaattaccca	780
ctctcgtggc	ccacagaggt	tgactcattc	aggccccctt	ttgttcagat	gaggaaactg	840
aggctgactc	cgaagcctgg	gggctttcag	atgtggagtg	ggtccctgtg	cccaggtgat	900
gaggggacca	ggcgggtctg	gagcagggct	ggagtggggc	tcagatgtag	taggctggca	960
gttaaagggtg	ccagatgtga	gccaggctgc	tgggtttgaa	tcctggagct	gcctcatagc	1020
agcagtagga	ctttgggtaa	cttacatagg	tgctgtatgc	ctcagtgacc	tcattctgtaa	1080
tatagagatg	ataagagtac	ctgtctcatt	ggtctactga	gttgtccgga	ttaactcatt	1140
aaatgagtta	aaactcatga	agcccttgga	actgtgactg	acacatagta	agtactcaat	1200
aaaaaataac	tgctaagacc	agccacagtg	gtcacacct	gtaatctgag	cattctggga	1260
ggccaaggcg	gaagaatccc	ttgagcccag	tatttcaaga	ccagcctaaa	ggtcaacata	1320
ggcagactct	gtctctacta	tacattttta	gattaaattt	ttataataat	aataaccact	1380
aaaatgtgat	tactaaagac	agcttcttca	cagtacaaag	agatgctctt	ctgagtacca	1440
actctttgga	ggataaactg	cccttatacc	ttcaaaaata	acacttgcca	tatatcaagt	1500
cctttcaagt	acctggagat	ttaccagca	ctctgagata	aataccatta	tcctcttggg	1560

cacacagagg ctcagagagg tttagtcatt tgcccaaagt cacacagcct gtacgaggcc 1620
 aggctgggac tcaaactcag ttctgactga ttctaaaatc atgtgtttta ctgctgcact 1680
 ctaggaccac ccgcaatgga tctgtgaacc agaaccagct ctggttctga cctgcctagt 1740
 agggcctttg gcatttgggg gaggaggcca ttggaagtcc gaagccccct tccagattag 1800
 gcatgattgc agtaagagaa gagacagacc ctttggcccc ccaccctgc tcaggctcaa 1860
 aaatgcagac cctgccgaaa cagtccttct caccagaag caccatag ggtgggctga 1920
 gtaaccttgg gggcctcgtc agtcttgggc tgcccatgc cctgcacagc ccgcctgagg 1980
 tttgaggaag gggcagttgg ctaggcccag actggagaaa gccacccac catggctctt 2040
 ctgcaagaac cccggccag ccacaagcct aagccccctc cttaaagct ctcctctga 2100
 ccttagctgt gcatcaaggg agaaaagaaa gctccaggcc ggtgcggtg gtcacacct 2160
 gcaatcccag cactttggga gaccgaggct ggcagatcat taggtcagga gttcgagacc 2220
 agcctggcca gcaaggtgaa gcccgtctc tactaaaatt acaaaaatt agtcaggcat 2280
 ggtgacacgt gcctgtagtc ccagctactc tggaggctga ggcgggagaa ttgcttgaac 2340
 ccaggaggcg aaggttgag taaaccaaga tcacgccact acactccagc ctgggcgaca 2400
 gagcaagact ctgtctc 2417

<210> 394

<211> 2472

<212> DNA

<213> Homo sapiens

<400> 394

agatgctggc tgccaagcag agctataaaa tgtgcctcga cttaattttt ccatggacac 60
 aacctcaaga tgggccagcc agactctgga ggagctggga ttccaaagtc tctgcctg 120
 tctgctctgg gatcggcagc tggagttggg gagagggaag tatttggggg tcggcattgc 180
 cacctcctgg gccatttctc ttctaatat ctcccaaag cctgatgcag caacagagta 240
 agttttcatt cagcactgat tcagggttgg aatttagtac aaattgctta catctgcctg 300
 gccatatccc aaataggtag tttagagcaa ggaggagggg cagcattggc ccacttcttg 360

gagccccgggt agccgcctgc taaagaatct ggtgccatgc tgggaccagc cagcccaggg 420
tacaaaactc tccaacagag ttgagaaaaa acagcccaag agagctgcca gagacgatac 480
agcgattcca tcccaggcat gattggaagg gctggggcag ggaagctacg aagaccccag 540
aagcgggtgg agatggagaa aaggcaggcc tgaaggagca agagcaatgg cagaaaacac 600
acacacacac acacacacac acacacacac acttcaacat cagccaacta ggggtgtgtgc 660
actaacctca tacatttgggt aacctcttcc cacaatccag aagcctgcca agcccctggg 720
ctccccaccc tactccaccc cacaccagct tggcagcctt gcttgtgctt cctgctgcga 780
ttgtcctcc aacatcaaag tcaccgctgt cgggagctga aatgaggga caagtatagg 840
ccaggagagc agcgccttct cccagcaccg gcgaactcag gcctgagggt ccctctccct 900
ctttcaagct ttcagtctcc ttttgtgca gtatccttat aagggagaat ccaattctac 960
cctccgccccg actaagaaac gtacacattc cccaggctag atgccgactt ctcaccagct 1020
ccacagaagg cactaacccc atcacaggac aggttttgct ttttttattt cttatcttaa 1080
ataaacaac cccaaagcca ttgactgggt cagatcgccc tgcagctggg agccaggaag 1140
tgtgtttagc gagaaggggg tggggacgcg ggtgcctgga gcccagagg ccctgaagct 1200
gctggagtgg agtggagtgg ggtgaggggc aacctgctct gcccggcggg caggagctca 1260
ggctcccacg gcgtccgccg ctcagcccgc cgccaggaac cctcggctgc ttccattgtt 1320
gcacctccgc tgttgccatg ttggaggagg agccccctga cctcggctgc ctccactctg 1380
ggggcacttt acagacgtg gggccgatgc aaccgcagg atgcgtgtcc tacctgcgt 1440
agctgctggc tctgctgcaa catccgacgt gtcttgtgcc tggcgacgtg ggctgctcgc 1500
tccgcgcctc ccgggctcgc tctgcggctc caggcgcctc ttgcaccagc gcgagaggag 1560
ctggccggcc gcacgccgc tgctcccggg ccgtccctt ctccaggctc cgcacagacc 1620
ctaggctcca aggggcagag ggagaggcag caaagggcgc aaggaccagc ttgtgggggt 1680
ggggaggggt gctctccgc gagagcgtgc gcgagctcgc agagtcaggc cccccgggt 1740
gagacaatag cggcagcagc gggcgagaga ggggaagcca tctcccggac acccggcgca 1800
ctgcacggcg acgcgacgt cggccagacc ctgcctggac aggcaggcac ccggccgccg 1860
gctccagccg cagcgccgaa tccgccgca gccggagggc ggggcggctg ctggaacccg 1920
ggccgccctt cgcctctccc ctccccttcc cctcctctt ctcttctct ctctctctct 1980
ccccccgac tcccgccca cttgccattg cgtgggggaa gagaaacgcg ctggcgtcaa 2040
gttgtgcact gcaaccaag agccaggatt tccactcccc acttgggtga gggtttttgc 2100

ggatggtcgt tagtttcccc tgctggaacc ccttggcttt gggtcagagg aaagctcaat 2160
 cattctgcta gaaatgacgg tgctgaggtc cagttatccg tttcaggaat ttctaccata 2220
 attaaggtag cgatgttcgg gggatccctt accttgaggg ttaggttggg gtagagagag 2280
 gctgtctccg ggctttacac gctcagtgtc attcgtcttt ctgtctcctt ccttcctccc 2340
 tttctggaag gggagtctcg tttgtttttg tattcgccca ggtggatctt ccgagatgcg 2400
 atccaggaaa cagcagtcaa cctaagtagg gaggggagat agaggatcct ccaacccaac 2460
 tagggtagtg ag 2472

<210> 395

<211> 1888

<212> DNA

<213> Homo sapiens

<400> 395

attggagccg gcttggctgg cgagcccggc tgaggagcct cttgggccgc acttactgcc 60
 gcgtccgctc ccggtccctg gcccctcagc ggcatggcgt gcggggcgac gctgaagcgg 120
 cccatggagt tcgaggcggc gctgctgagc cccggcccca ctccgggcct caggcccccg 180
 gacgccgagc cgccgccgcc gtttcagacg cagacccac cgagagctct gcagcagccc 240
 gccccgcccc gcagcgagcg gcgccttcca actccggagc aaatttttca gaacataaaa 300
 caagaatata gtcgttatca gaggtggaga catttagaag ttgttcttaa tcagagtga 360
 gcttgtgctt cggaaagtca acctcactcc tcagcactca cagcacctag ctctccaggt 420
 tcctcatgga tgaagaagga ccagcccaca ttaccctcc gacaagttgg cataatatgt 480
 gagcgcctct taaaagacta tgaagataaa attcgggagg agtatgagca aatcctcaat 540
 accaaactag cagaacaata tgaatctttt gtgaaattca cacatgatca gattatgcga 600
 cggatatgga caaggccaac aagctatgtg tcatgaagct ttgtcacata tctgggtacc 660
 aggtttgacc tcaagagatg gctgctgtac actttttgca actggtttga tgacacattt 720
 cagctccaac tttgcatcct gagaacactt aaacgtttct gcaggtccat tttatacaac 780
 ttgaaagacc gtaaaacttt ctggttgcca caagcatatc tttcttttct gctcatccaa 840

taaacagctg tgcctactg tgatagattt tccaaacaaa aatacctgga gcagcagttt 900
 agcaaaatat gccttcagtg gcattcaaca aatggagttt cccaagcac agttctgtaa 960
 gaagtgcgtg tgagagtgtg tgtatatgtg tgtatgtgta ttttaagtta ttatttgtat 1020
 tgtgcaaaaa tttttttttg atcttgggga ttctggctgt gaatttggtg cacgacaatt 1080
 atggtaaaaa aacatttgct tggctctaaag aagatcatta atgttttggtg accatacaag 1140
 ttgtaacagt ggattgtttt tatgtgtagg tattgttaaa tacagggact gtttccaggc 1200
 acagaatatg aatcgtaagt taggatggac attagatgtg attatgatga taaagcgaag 1260
 gtctgcggtc ctatatctac agacacgtgg tgagaaatta gaacaaactg gagacgggcc 1320
 attgacacat ggactctgcc tgggcatgtt aggttaattc tttgactcca agccttaaaa 1380
 tactcacatg gagtcagcgc tcacctcatt cacacaatta tcatagagct ccctggacac 1440
 tgaacctcta aagggaag gtctaccctg gagccaggag catcagggtt ggcttgggag 1500
 catgagaggt gagcccaggc ctaggcctgg gccaggcccc ggcagcactg ctacttggga 1560
 ggagccactt cacctttgta ttagttatta aaaaatataa tttgggctgg gcgcagtggc 1620
 tcacgcctgt aatcccagca ctttgggagt ccgaggcatg cggatcactt gaggtcagga 1680
 gttcgagacc accctggcca atatggtgaa accccatctc tactaaaaat acaacaaagt 1740
 tagccgggcg tgggtggcagg cgtctgtaat ccagctgct tgggaggctg aggcaggaga 1800
 atcacttgaa ccctggaggt ggcggttgca gtgagcacag atcatgccac tgcactccag 1860
 cctgggcaac aaaacgagac ttcgtctc 1888

<210> 396

<211> 2620

<212> DNA

<213> Homo sapiens

<400> 396

gtgctgctcc ctgccttttg gggaagagga ggcctcacac cacatcccca ggtggccgtg 60
 tggcctcgac tccactgacc caggatcagg agaggctgag ctctttctc agcagcttct 120
 tcctatggcc ccagcctccg tgccctcttc cctccagggg ggactcgggtg cctgcctggg 180

gaggaaggag aggcgttgca ggcgtccgag ctgggccaca gcctgaacga gaacgtcctc 240
aagcctgcgc aggagaaggt gaaggaggga aagatTTTTg atgatgtctc cagtgggggtc 300
tctcagttgg cgtccaaggt ccaggagatc ggtagtaagg gatggcagga cgtcaccacc 360
TTTTTTTcgg ggaaagcaga gggcccttg gacagcccct cggagggcca cagttatcag 420
aacagcggtc tggaccactt caaaaacagc aacatagacc agagcttctg ggagaccttt 480
ggaagtgtctg agcccaccaa gaccgcgaag tccccgagca gcgacagctg gacgtgcgcg 540
gacacctcca ccgagaggag gagctcggac agctgggagg tgtgggggtc ggcctccacc 600
aacaggaaca gcaacagcga cggcggggag ggcggggagg gcaccaagaa ggcagtgccg 660
ccggccgtgc cactgatga tggctgggac aaccagaact ggtagggccc actgccccc 720
cgtccccagc gccccgggc gacttcgtgt ttgactctg ccctcgtcgt tcctcctcct 780
tccatttgac ccaagaatca gcaactgcag tgtgaggaca gcgtctcggg aggcaggacc 840
ctaggagac ccgggtgtgc gccgcctgcg cgtggggagt cttcggtgcg tgggggcggc 900
ttgtgtcca gcctgtgtgg gggccgtccc gtcccacact cccctgggca ttcttgact 960
caaggccggg gctctgcgtg gcttgctggg aggtgggctg cagcacagag gcctgtgact 1020
gcgttccagc ggccagtta ctacgcagta tctctggggc ctgggaccag ccacgtgccg 1080
agctgtcagc gacgtgaggt gtcccttctc gttgagatat ttaactttgg ttttgctcta 1140
gttctttctt tttgaagaga gtgactggag tggtaaagat ggaaatgctg gaaatgatac 1200
tggcgctcac gctgccatcc gaccaccctc ggctcccgag tccacgcctg cctgggcctg 1260
tgctgtcaga cccgcgtcgg tcgtaaccct ctgtggctcc cctgcatcag caccgtccca 1320
ccaccaagtt caccaggttc accagacacg gcctccacaa tagccacacc cacacctgag 1380
ctgttctcag tgctggaact tgaccatcct ggaacaccct ggaagaaaaa ggagcgcagg 1440
gtgggccctc ggccctgatg caggagggtg cgatagcgga cgtggccagg caggaggggc 1500
cgggttcagg agctgagcag gggatgcctg tgcgtggtgc ctgggtctag ggaagctcca 1560
gccccaggat ggggctgccc tgcacaccgg tgcccgccac atgccaacce tcacctcccc 1620
gaggactgga tgatgtgctg ccacgtgtga ctctctccc ttgtctgccc tgtgtgacct 1680
tcagtcttgg ccagccatgc atgcgcccga agctcgtgca gtttgtacgt gaggtgtctt 1740
cctccctgcc accatgtcga tcactctggc cttggccatg ctccctggtc accccacttc 1800
ccggtcgcgg tctgcagcac tcctggagca gcctgggccc ttcagcccct gtgctcgtcc 1860
caccctaggg actcagccac ttgcagaaca ggatgggacc gagatttcag cgagccctcc 1920

tggcgcccg tctctcctgt gggcaccagc cctcttggtg gctggtgtgg agggccggtg 1980
 tccttggctg ccacggaggg atttgatcac cgaagcagcc acctgctgta gttggacctg 2040
 aggtcagagg cggggcatca gaggtcaag gtgctgagaa gccaccggga aagcagccag 2100
 cacaaagggc ccaggaagcc agccccgag agctgagcgt gggggtcttt gagtgtcttt 2160
 ctccaagctg agacgtgggc ggccgcgtgg tatctcccga gggctgcttg gaccctggtg 2220
 ggctgagtgc tccgaggagg ggtggactcc accttggaca gtgggatgtg gtgttccaca 2280
 tgtgcctgtt tccacgccag caccttgact tggcagcatg gagccaaggt ctgtccccgc 2340
 ccaggagggt gccttcctcg ggggtagggg gacggccac tctgccccag ggagtccctt 2400
 ttgatgggaa gtgcagtcag cagcgtggag gtgtctgggc caccttcaga aggtggatgt 2460
 ggtggccgag accccgtcca cggagggtga tggcctttcc cttctgcagg tgcgggcagg 2520
 tgggcctggg accggtgctg gggcctctcc ttgctgtgtg tgagggccca ggtggaaggc 2580
 gcggacctga cagcattcca ataaagcata cgggaacatg 2620

<210> 397

<211> 2280

<212> DNA

<213> Homo sapiens

<400> 397

gtgtttgcag catttgtgtc atcggtgaga gagactcact gacttccact tgatagacca 60
 aatgttcgaa agtccaggat gggctgtgtt cgcgtttctc gataacgact gtcagcacca 120
 gcagggtgc ctgaggatgc acgccttggc cctcggccct gagagtcagc gtgagctccc 180
 gctgctcgcc cgcgcccagg ctgccgttga ggaacagcac cccagggtct ctgtcgatgg 240
 caaagacgcc tggctgcggg ctggcgatgg agtaccggat gagtccgttc cgcccactgt 300
 ctctgtcttc cgcacgtgcg aggtacaagg ctgtgccagg gggcgtggtc tgggatattc 360
 taatctcatc cgaggtcctg aggaacgctg ggtggtgtc attgacatcc atgactgtta 420
 tgttgacctc ggtgctgctg caggctgggg cgctgccgag ctgcgcctgc accgtgagca 480
 caaccacggg ctgcgtctcg tgatccaggg gcttccgggt gcgaatagtg cccagccgcg 540

ggtgaatgga gaactttccg ccgagatcac cagaagaaat cctgtaaaag attggttctg 600
aggagtctga aaaagagaga ggggacaacc actgtatgtc aaaagggtgg acccactgga 660
aactcagaaa ttgaaatgtt aatacagtca tccactgcct aatgacactt cagtcaatga 720
tggatcacat atactatgat ggttccgtaa gattctgaca ccgtatttta ttgtaccttt 780
tctgtgctca catacataaa tccttaccat tgggggtacaa ctgcctacag tattaagtgc 840
agtaatatgc tgtgcagggt tgtagcctag gagcaatcga ctgtaacatt tagcctaggt 900
gtctggtagg ccacaccatc cagggttcgtg tgagtacact ctgtgatgtc tgcacactga 960
caaaattttc taatgaggca tttctcaaaa catttcccat cgtaaggac gcatgattgt 1020
atattctcca tctacagaga ctgctgtgca atgtcttact ttctccactc tccaaagcct 1080
gctgaaaagt ggacacacgg ttttaagaat ttttttggtg tacgaaaaga atgtccaatg 1140
ggcaaagagc aagccacagg tttcactctc ttccttcac cctcttgcatt tagataaaag 1200
ggaaagatat tcagaaaata attcaaatac ctttttttaa atatatattga ggaagtcaag 1260
ttcaatttat gttgatgtta ctctattata tctacctatg aagggcaaatt actctccata 1320
gagattgagg gaaggagag aggaaggaac aggaggggac taggaggagg acaagctctt 1380
tggaaggta attcatttct aggaatttat cctgcagagg ttcctctaca ggtgtgaaaa 1440
agtcacacac ggctatttgc tcaagtacta tttggactag caagattttt taaatccttc 1500
aaattggtag caaatgtaaa cataaaacat atctaagttg aaacactata aactgtcttt 1560
taaggaaaca gaatggcatc catttatctg gaaagttgtt cagtatatac taagtgggga 1620
aagaagctct ataacaaca atatagaag atgcattttt gtcaaaaatt tgtaaattgt 1680
gtgtgcatgt gtgtgttttt gtgagtgggt tataggagac atatatattg tatattataa 1740
tctgtattat tttaaacatt ctttttaaaa tgcctattat ttttgtgatc agaaaaaaaa 1800
ttgtgggatg gacagaaaca atgttggag aacaaagagc aagccacagt ttgtgttattc 1860
tcccttgttt tgacttgcgt ggaaagaaga aaaaaattat tcaagattgt accgcctaca 1920
aaaaacaag aatgtttcca ataatggaat tccatgcagc ataagaaata agtacttact 1980
caagggtctt cttgctttca ctgttccaat gggactatct tcaggcacat cttcataaac 2040
taagaaagt tacttaggcc tttcaaaactc agcagtgcc agagttgtct ggaaaatgtg 2100
tatggtgaca tcggcattaa tgacagctgt gagcccgcca ccgtcttgag cagagaccat 2160
caacaaaagt gtggtagatt ccaaatgact aagaggtaat gttaagtaaa taattcctgg 2220
gtagggaaaa gaaaacattg gtaaacagat aacatgtaat aaatactgat gagcaatagt 2280

<210> 398

<211> 2192

<212> DNA

<213> Homo sapiens

<400> 398

gcggtgcccc	ggcgagggag	cgtggcggcg	agctgtttgg	gggggttggc	gacggcagcc	60
cgagggcggc	gcaaggcctg	aggcccagca	cagtgatgtc	cgagctcagc	gatgaagcca	120
gcgagccgga	actcctgaac	cgcagcttgt	ccatgttgca	cgggctcggg	acacaggtca	180
gcggggagga	gctggatgtc	cccctggatc	ttcacacagc	tgcttcatt	ggccagtatg	240
aagtgtgaa	ggagtgtgtg	cagcgggagt	caaggtggac	gcgagagacc	acagtggagc	300
cacagcccgg	atgctggcca	agcagtacgg	acacatgaag	atcgtggcct	tgatggacac	360
ttactcgccc	tctctgcca	agagcctcta	tcggagccca	gaaaagtacg	aagatctgag	420
ctcttctgac	gagtcctgcc	ctgctcctca	gagacagagg	ccttgccgga	agaagggtgt	480
cagcatccac	gagggaccgc	gagccctggc	caggatcaca	ggcattggcc	tgggcggcag	540
agccccacgg	cctcgctatg	agcaggctcc	tcccgtggc	tatgtcacct	tcaacagcag	600
tggcgagaac	cccctggaag	aagagggcct	ctgctgccgg	gatgtcacct	ccccatcaa	660
tgagcgggat	gtggagagca	gcagcagcag	cagcagtcgg	gaggaacatg	ctttctgtgc	720
caacctgggg	cccgtccaga	gcagcagcag	cagcgagggc	ctggccagag	cccaggggct	780
cagcagcgaa	gcttctgtgg	agagcaacga	ggactcggat	catgcctgta	aaagctcagc	840
tcgcaaacia	gctaaaagtt	acatgaagac	caagaatcct	gacagccagt	ggcctccccg	900
cgctgcaact	gacaggggaag	gctttctcgc	tgagtccagc	cccagactc	agagggcccc	960
ctactcagga	cccaggttaa	gaccgcttgt	gaaactggag	gttacactca	gagacggcac	1020
tttttgtgac	ttaggaggca	tgtgttgtgt	atatgacgtg	ccaggcgctg	ctaggagaac	1080
agaatggcgg	tggcatcccc	atggcctgtt	aggctccaca	ggctcacagc	cggctccatg	1140
gctggcagcc	ccgctgcagc	gcttctactc	tgttcctctc	cacggaaagg	acctgtctcc	1200
ctgctttcca	tactggagtt	ggcctccctg	agcctgggga	gaagaaaagc	acatttgacc	1260

tcagagctgc ctgcaggagt ctgacaagat gtggttgaag cagagacagg aactacacac 1320
 agtgtgtgct tggatgatggg tacagctgcc accatcctcc tcctttctgt ggtccctctg 1380
 accacacatt accttaggga tcagaggtgt gactcacagc tcagctgtct cacctgtgtc 1440
 tgctgagttc tcctaccctg tgtgggcaga agaggcacgg agaggagagg cagagggaag 1500
 ctctggttgg ttatttggtt tgtttggtcg agacggagtc tcgcactgtc atctgggctg 1560
 gagtgcagtg gcgcgatctc ggctcactgc aacctcctcc tcctgggttc aagcgattct 1620
 cctgcctcag cctcccaagt agctgggatt acaggcaccc gccaccatgc ccatctaatt 1680
 ttttgtatth ttagtagaga cgggatttca ctatgttggc caggctggtc tcaaattcct 1740
 gacatcgtga tccgcccgc tcgacctccc aaagtgtggt gattacaggc gtgagccacc 1800
 acacctggcc tgggtgcatg cccggcctgg ctggttattt gttaaagcac tggctttgct 1860
 gttcagtaga gccttggatt tgccggcttc tccctgcagc ccctgggtca gtgagcaggc 1920
 acacgtctcg gtcccttcaa catacgttga gtggagtctg gtcagggtag tgtcctaagt 1980
 atgtttcttt cagaaaatag cttgaagaaa atgtcagagt aacatttggt tgtccattaa 2040
 aagcaataaa ctctcaaaag taggatttct ggagttgaaa agtaaataa atgaaaatat 2100
 cactagacga gctcacagca gaattgagca ggcagaagag tcagacaact tgtgaacaca 2160
 ggtcacctga gatcatctcg cttgaggaac ag 2192

<210> 399

<211> 2834

<212> DNA

<213> Homo sapiens

<400> 399

aatgctgttc agctgcctgt ttgaagaaag tttatthttt aaaaactatg tttgcagttg 60
 gctgaagaga gacatggaaa tattgaagaa cgtatgagac atttagaggg tcaacttgaa 120
 gagaagaatc aagaacttca aagagctagg caaagagaga aaatgaatga ggagcataac 180
 aagagattat cggatacggg tgatagactt ctgactgaat ccaatgaacg cctacaacta 240
 cacttaaagg aaagaatggc tgctctagaa gaaaagttgg cagctaccag accagcaaga 300

gttatgagag ctggttacca attccagagc ataaattaag aatgttttaa ttcaagaatc 360
agaaactttc agaaagaatc ttgaagaatc tttacatgat aaggaaagat tagcagaaga 420
aattgaaaag ctgagatctg aacttgacca attgaaaatg agaactggct ctttaattga 480
accacaata ccaagaactc atctagacac ctcagctgag ttgcggtact cagtgggac 540
cctagtggac agccagtctg attacagaac aactaaagta ataagaagac caaggagagg 600
ccgcatgggt gtgcgaagag atgagccaaa ggtgaaatct cttggggac acgagtggaa 660
tagaactcaa cagattggag tactaagcag ccaccctttt gaaagtgaca ctgaaatgtc 720
tgatattgat gatgatgaca gagaacaat ttttagctca atggatcttc tctctccaag 780
tggtcattcc gatgccaga cgctagccat gatgcttcag gaacaattgg atgccatcaa 840
caaagaaatc aggctaattc aggaagaaaa agaacttaca gagttgcgtg ctgaagaaat 900
tgaaaataga gtggctagtg tgagcctcga aggcctgaat ttggcaaggg tccaccagc 960
caagtgatct gaggaacat cggagaaaga ttgcagttgt ggaagaagat ggtcgagagg 1020
acaaagcaac aattaaatgt gaaacttctc ctctcctac ccctagagcc ctcagaatga 1080
ctcacactct cccttcttcc taccacaatg atgctcgaag tagtttatct gtctctcttg 1140
agccagaaag cctcgggctt ggtagtgcc acagcagcca agactctctt cacaaagccc 1200
ccaagaagaa aggaatcaag tcttcaatag gacgtttgtt tggtaaaaaa gaaaaagctc 1260
gacttgggca gctccgaggc tttatggaga ctgaagctgc agctcaggag tccctgggg 1320
taggcaaact cggaactcaa gctgagaagg atcgaagact aaagaaaaag catgaacttc 1380
ttgaagaagc tcggagaaag ggattacctt ttgccagtg ggatgggcca actgtggctg 1440
catggctaga gctttggttg ggaatgcctg cgtgggtacgt ggcagcctgc cgagccaacg 1500
tgaagagtgg tgccatcatg tctgctttat ctgacactga gatccagaga gaaattggaa 1560
tcagcaatcc actgcatcg cttaaaacttc gattagcaat ccaggagatg gtttccctaa 1620
caagtccttc agctcctcca acatctcgaa cttgtccggt ttttctacag accctggctt 1680
atggagatat gaatcatgag tggattggaa atgaatggct tcccagcttg gggttacctc 1740
agtacagaag ttactttatg gaatgcttgg tagatgcaag aatgttagat cacctaacia 1800
aaaaagatct ccgtgtccat ttaaaaatgg tggatagttt ccatcgaaca agtttacaat 1860
atggaattat gtgcttaaag aggttgaatt atgacagaaa agaactagaa agaagacggg 1920
aagcaagcca acatgaaata aaagacgtgt tgggtgtggag caatgaccga gttattcgct 1980
ggatacaagc aattggactt cgagaatatg caaataatat acttgagagc ggtgtgcatg 2040

gctcacttat agccctggat gaaaactttg actacagcag cttagcttta ttattacaga 2100
 ttccaacaca gaacaccag gcaaggcaga ttcttgaaag agaatacaat aacctcttgg 2160
 ccctggggac tgaaaggcga ctggatgaaa gtgatgacaa gaacttcaga cgtggatcaa 2220
 cctggagaag gcagtttcct cctcgtgaag tacatggaat cagcatgatg cctgggtcct 2280
 cagaaacatt accagctgga tttaggttta ccacaacctc tgggcagtca agaaaaatga 2340
 caacagatgt tgcttcatca agactgcaga ggtagacaa ctccactgtt cgcacatact 2400
 catgttgacc agccactcaa aggaggcagc actgacctgc tatggcgtct tttcagtcta 2460
 ctctacctaa agtgactac catctaagaa gacgagcagt gaaaaccttt gtgaaaactg 2520
 aattctaagg aaataatgac gtcatgactt attaaaagct gaaaaatgtg atttttgggg 2580
 ggagtcagat attacatttg attagtttac tacaaattgt aataaaatgc ttaagtcatt 2640
 tgaataataa acatcatcta catcataaac tctgtacaac agatgctttt atgaaatgaa 2700
 gccagttgtt tttcatgttt tattgtaata tactaggcat ttatgtatta ccgtgcattt 2760
 ctttttaaat gtgtaagtct tatgtaaag gatataaata tgatttttta aaaaataaaa 2820
 tatatggttc atgg 2834

<210> 400

<211> 2947

<212> DNA

<213> Homo sapiens

<400> 400

agatttccgc ccaccttccg cctcgtctag ccgcgccaca gctagcgggg tgatctttcc 60
 cccctctgg taggagttgg tgaaggtgag actcatgagg gaatacaagg tagtggtgtt 120
 agggagtgga ggggttggca aatctgccct tactgtgcag tttgtcactg ggactttcat 180
 tgagaaatat gacccacca ttgaagattt ctaccgcaaa gagatcgaag tggactcttc 240
 cccctccgtg ctggaaattc tggacaccgc aggaactgag cagtttgcct ccatgagaga 300
 tctctacatc aaaaacggcc aaggtttcat cctggtttat agcctgggta atcaacagtc 360
 ttttcaggat atcaagccaa tgagagatca aattgtcaga gtgaagagat atgaaaaagt 420

cccactaatc ctagtaggaa ataaagtgga tctggaacca gaaagagagg ttatgtcttc 480
agaaggcaga gctctggctc aagaatgggg ctgtcctttc atggagacat cggcaaaaag 540
taaatacatg gtggatgaac tttttgctga gatcgtcagg caaatgaact attcatccct 600
gccggagaag caagatcagt gttgtaccac ttgtgtcgtc cagtaaagaa gataacctca 660
atcatggcca taccgagcag ataaaactca gaggaaattt gcacagatgc tgctttggag 720
aactttacaa cctgggttgc agaactgagc cttggtaaac ctgtctctat tacagcatgt 780
tgccatacat ctatttaagt gcataaggtc tttggccttc aagatccatc gaccttaaac 840
aggaatgctt agcacgttta ccatacgttt aaaatccatt ctttatcaat cagtcctttt 900
atagctttct aagtctttat tgatggctaa tatacaaggg ttaattttta atattttaat 960
tgatttcttt aatcagtttc tgcacttgta tttattaaat actcaaactc agtattacct 1020
actcaatgcc ttttaaaga aagttataat ggagaaaaaa ttgagcctta aacaaatggg 1080
tacttctgta tattacctcg taccagtgtc tcatcctatt tgtaaaatct ttctccttta 1140
aaattattgg ttaatacttt gagactttgt ttacgtgtgg cagtgttgta aaaagaaact 1200
aaagatcaca ttttacctgt atggatggaa tatccctttt cttcaagtgc agtttgtgat 1260
gtgttttggt tttttttttt ttttttgta attaacatgt tctgaagggtt acaattgata 1320
tttgaaattg actgtagagc atttagttga agagttaagc attcagttcc attaggtttt 1380
cacatgtgtt aatctcattt acagcattga attgcggcag taacattttc ctttctgtga 1440
agttctaaat ttagttatga cctatttagc aatgcctttg aaaagggata ttgtatccat 1500
ggtaaattaa ttgtatactt aaacagagat agctcatctt tgcctatcag gcttgtaatt 1560
gacatctagt agacttctgc acatgtaaaa ttgaattcaa ataaaatcat acacactttc 1620
tagttcttaa tatttgtctt tctgaataat agtttaaagc aatatttggt aaagttttct 1680
tgcactatca caattgcttt ttagttattt ctcaagaagc atgttcgtat tagagacaaa 1740
atctgtgtaa caggaggag aatagcgcca agtctctggg ctatttttta tttttgcaaa 1800
tgtgctttct aatagccatt gccttccatg ttgtttacct aatcagcata tttttgtctg 1860
aatacttgaa cattttaaca gtaacgcagg tgtagaatca gaaaggaaac ttatgcagag 1920
taatattttg gttcagtttt aacatcgtga caatgagggc tttttctagc aatgattttt 1980
aaattgtgta agtttgacag tattttattg ttgggttttt atttgatttt agttgtgtgc 2040
ttttcatttg cagaagttag taactgcagc tcacctactg caccaaagtt ctcgatttta 2100
ggagcccagc tttagtcatt tgaacatgct tctaaataaa ataaaacaaa accaaaacta 2160

tacttttgat ctataataag agctcaataa ctttgtcaag gaaagctcta atatatgcag 2220
 tgatggttta tgaaaggggtg tggcaatfff aaattttatat tgttgttgat gttcaaataa 2280
 agtggatatct acattcatgt gattttatggg tcagcatgac cattaattac tgagtagaaa 2340
 ttgactaaac tttgatttcc tttttttaaa tcgtgttgca tttgattcct gagcaaattc 2400
 cctcaaagtg aactcttggt cttaaatfff gaattttatg gtgagattgt aaagatagag 2460
 gcaattgaaa cattgttcct tatttatgaa ctgcttgaag tgaatactta atttaagttt 2520
 gcactttaat accaaactta aaaccaaaca ctcattttaaa agtaggttaa gtgatcatgg 2580
 atcattgtta ttagctttgt ggctttgtga aattctaaag gaatcaaata attcatcatg 2640
 atttaaattt tctagagatt ttgatttttt tataatgttt ctttcctgta gatttgtgttc 2700
 ttgtttctct ctctctctct ctctctctct ctctctctct ctctctctct ctcaaaatta 2760
 cagtgttcat tgtcattgac ctcagcagca aatttgactt gaattcactt aggatcgcag 2820
 gaatcagggg aaagtgattt taaaggtggg ttctccagca cattttaaga aaagggacca 2880
 aaagtatttt tagcttcctc aatagattgc atgttgctta ttaggataat aaattaatat 2940
 taaatgc 2947

<210> 401

<211> 2315

<212> DNA

<213> Homo sapiens

<400> 401

atactttctg actctgactt ccctttactg ctcaatgcaa agttcctgga cctgggtctg 60
 ctcatcccag tttctgacag aatacacatg aggtgtcacc atcattggggg aggtgagggc 120
 tttgaggcag caggaaggga ctagtcattt gtttccacaa tgaagccctg ggggttcagag 180
 taccagagcc tcagtggagg tcagcagatg tccctccctc cttggaatgg cagcccatcc 240
 caggagatgt cctgacaaca cctgtgtacc ctgcataggg tccctgatgg gcctgggtga 300
 cattatctca cagcagctgg tggagaggcg ggggtctgcag gaacaccaga gaggccggac 360
 tctgaccatg gtgtccctgg gctgtggctt tgtggtaagt tctcccctca acagggttc 420

agtggactca acagtggctt tagttctttg ccataccttg gcttcccttg gactctcaca 480
cctaagccaa cctgccgccc tcttttttct tagtgtccac ttcccctatt ctgatacttg 540
gggcagggag cttagtgagg tagaggccta gggctccctc actgcagcct gctgctatct 600
ggggtttact tccaggggccc tgtggttagga ggctgggtaca aggttttgga tcggttcatc 660
cctggcacca ccaaagtga tgcactgaag aagatgttgt tggatcaggt gagcaggaga 720
acagagtggg gaggggtgagc tgtgttgggg gtaggtgggg atttcagcac tcataggact 780
ttaatttctc ttccctaggg gggctttgcc ccgtgttttc taggctgctt tctcccactg 840
gtaggggcac ttaatggact gtcagcccag gacaactggg ccaaactaca gcgggtgagc 900
tgggcagggtg tggagaatgt ctctggctgg cgggctgaca gccagggga agaagacagg 960
ttttacaggg ataaaaaagg gggtaagtgc aggtagggcc ccaggccatg gaggagagga 1020
gctgagggtt atggtgcagg aatgtgctct ttgaacccaa gtctgtgtgt gacattcata 1080
ctgggaagtg ggagctgctt ggaggcgcaa gtgttaattt gttccttctc tgtctcccca 1140
ggattatcct gatgccctta tcaccaacta ctatgtaaga gctgacacct caactgcttg 1200
ttctcctgct tccttaagtc tagaactgtc ctgggattgg ggggtcctcc tgacatggga 1260
aacccttccg ttgggattac tctttcattc ccaggatggg caccataaat agggaagcca 1320
tcacccaact gttcaccttt ttcttgtgtg cagaagtgtg ggtagggcca ggcaagacag 1380
tgagtctggg gtcagggtgt ggggcagcca tccaaccttt acattttctc ttgcagctat 1440
ggcctgctgt gcagttagcc aacttctacc tgggtccccct tcattacagg tatgttgac 1500
ccctacccca cccatcaagg aagaccacg ttaccaacag ttggagacaa aatgattctc 1560
atttcaacct tgagctacct tagaccccca aacggaacac tgagccgtga tcagagtcc 1620
tcagattccc aagcgtgtta ttcagaatgt cttgccattt ccggaaactg tcccagagtg 1680
tctgcccact gaccttctc atctccctag ggaggatcct gcttctacca cccttgtctc 1740
catcccacct gagctccgtc tttgatggca tatctggagg gacagtggct ggggtgctgc 1800
agcctaggtt agacagagag gtagaccaga aggccaagta ggagcctggg cagacactca 1860
caataaagac agttgctgaa ctgcacccaa aaagatagtg gcactgaaga tgtgtggttc 1920
aaatgcttga aggtgaagga tcgtgggaac aggggaaaat atggaacgct tcagagggaa 1980
cagggccaaa atgtacatga gtagcatagc taaaacgaat acagactggc tgggcacggg 2040
ggctcacacc tgtaattcta gcactttggg aggctgaggc aagaggtttg cttgagtcca 2100
ggagtttcac accagcctgg gcaatatagt gagacctcat ctctacagaa aatacaaaaa 2160

attagccagt cacatggtaa catgtgcccc tagtcccagc tactcgggag gctgaggtgg 2220
gaggatcact tgagcctgtg agatggaggt tgctgtgaac tgagattgtg cactgcatt 2280
tcagcctggt gacagagtga gacgaccctg tctcc 2315

<210> 402

<211> 1933

<212> DNA

<213> Homo sapiens

<400> 402

cggaagtgtg gtgaaggtgg acacagaagc cgcagtttca ggggaggtgt ctaacctcct 60
ggagggacag tctatacgtg cggagggagg acacagcaga cctgtttctc aggatatga 120
cgaggctgcg tttcctctgg aggagatgac gttgtaaagc aacctgagga tgagatacac 180
cagctggctg tcgaaatcac agctcttcat tttcttgtac aattgtagtg gatttcgtga 240
gaacaccttg gatgcctttc tcttgcaatg tcctccatgt ccatgtaaaa tccagtcctt 300
ccaggccctg cctggctcta accctcatcc ccttcgaggg ccattctgtg tggacagttg 360
tgctgtgtaa ccttcagatt tcccacacat tacagcaaat gcaaatacac atagaaatca 420
gtggttccat ttgtggttta gagacacatg gtgccatctt catcttccgc tccacagctc 480
gcttctggca cccagcagtg ggttgcgagg ctccccatgc cagaaccttc ctcttttttc 540
ttaaaaactc ttcttaattg aatccaaagt atcttttaaa cgttctactt gtgtaatcat 600
gtcatctgtg aatattcaga tttatcttct ccttccaatc cgtgtacatt taatctcttt 660
ttctgtgcct tatttcgggg gctgggaccc ttcagtccag tgttgaagag aggcagccag 720
tgaggtctt gtctcattca aggactcaga gcaaagtgtg tccacattta atttcactat 780
gaaatataat atttgatgtt cagttttgta gatgctattt atcagatcaa ggaaagccca 840
gtctatacct aatttgttaa gggttttgct tttatcata agtgttgact tttatcaaat 900
tctttttgt atctattaag atgatagatg attgattttc atatgttaaa ttaaccatgg 960
gttaaacaaa cttaacctta tcatgatata ttattctttt tgtatttcac aggaattagt 1020
ttggtaatat gttgggtcaa tgtttaaaaa agaaaatgat gtgtaatttt tttcttttat 1080

tgtagtat ttt ctgtttaatt tttgggtatga ggattattca ggtctcataa gagttaggag 1140
 tatattctct tttaaaaaat atttgctaatt ttacactccc accaacagtg taaaagtgtt 1200
 cttattttctc cacatcctct ccagcatctg ttgtttcctg actttttaat aatcgccatt 1260
 ctaactggca tgagatgata tctcattgtg gttttgattt gcatttctct aatgaccagt 1320
 gatgatgaac tttttttcat atgtttgttg gctgcataaa tgtcttcttt tgagaagtgt 1380
 ctgttcatat ccttcacca ctttttgatg ggggtgtttg cttttacctt gtaaatttgt 1440
 ttaagttcct tgtagatgct ggacattagc cctttgtcag atggatagat tgcaaaaatt 1500
 ttctcccatc ccgtaggttg cctgttctact ctgatgacct atcaatgata gactggataa 1560
 agaaaatgtg gcacatat accatggaat attatgcagc cagaaaaag gatgaattca 1620
 tgtcctttgc agggacgtgg atgaagctgg aaaacgtcgt tctcagcaaa ctaacactgg 1680
 aacagaaaac caaacactgc atgttctcac tcataagtgg gagttgaaca atgagaacac 1740
 atggacacgg ggaggggaac atcacacact ggggcctgtc aggggggtggg gggctaggga 1800
 agggatagca tgaggagaaa cacctaaggt agatgacggg ttgatgggtg cagcaaacca 1860
 ccacgacacg tgtataccta tgtaacaaac ctgcacattc tgcacaggta cccagaact 1920
 taaagaataa ttt 1933

<210> 403

<211> 1934

<212> DNA

<213> Homo sapiens

<400> 403

aattctgctc gctcaggcca ccatggcaac agcctgcctt cccccactca gggggtcacg 60
 cacagccctg ccgggggtgag gccagctgc cacatcgcca caggctgccc ctgtgggaaa 120
 ggtcaccccg tctcctccct gggcagcaac gagaaaagga aaagacagcc cctctgccccg 180
 cctctgggtg acatctttca caatcggtatg tcaggcaagt gacatgaggc ccagcccagt 240
 gggccttaga gatagaaaac acatgctggg gcagggatac acacacacac acacacacac 300
 acacacacac acacacagtg gggccggaat ggacatgaac aacaacctct ccccaaactg 360

ctggttggag caggacgtgg ggtgtaaaca ccgtcaggca tccaatactc ctctcttggg 420
cctccggtgc cccacgcag tgacgcaacc agccctacac acgtgtgtgt cccaactcca 480
caccctgcca ggggtgcacac gcaccagcag ggcagggagg agtcacccac atcccaccct 540
gcagaacca ctgcctcaac cacactccct ccctcttggg ttggcctgcc tgggaagcct 600
cgggctggcc actcctgctc ccaaaatagg cggcccagcc agaccagggg tgaggcctgg 660
agggaaggag tgggggacgc tcacccaat cgggctgtcc cctgctgaaa gaaggccccc 720
aaacgtcctg ctgtgccccg ggggctgagc actttggacc ccctggccca gagctggacg 780
cgccgcccc agcagcctcc cctcccagcc ccacccacc catgccctcc ccagccagca 840
gctgaaactg gagctggggc tggagggggg ccagggggcg gccccagcc cagactgccc 900
tggcccgtt ggtaactct ctcagttcag agagagcagc agcgggcagc cagcaggcag 960
gctggagagg ctgggaggat tgtggaggac agggtttgtga acacacacac acacaaacac 1020
acacgcctcc aagagctttt gggctgaggc ggctgcccc tgggaactgg gtccagccag 1080
ggccgaaggt caccagcct gactgcccag gagccactg acccccgatc ccagtgtctc 1140
gtgaggctct taacagggt gtttttagagg acgggaggga ggtgtgtgtg tgtgtgtgtg 1200
tgtgcgcgcg catgtgcgt atctgctgtg gtgagatccc cagaaatgca ccacacacac 1260
acacccacac acaatcccaa agaccagat atacaggtagc aaaaccagac aaaaccatgt 1320
atgtatgtac atccatagaa gcagacacac acagaatgac aactgatag agaaacccaa 1380
agaccggac acacagcaa caccttttat gccagtcaca aaataccaga acaagcatat 1440
ttatgtctac acagaccac gcacgtcgt gtagatggat ggccacacag agatacagtc 1500
gaagacatag ccacatcacc atctacactc acaaactggc cacaaaaatg catgtttatg 1560
tgaagacca cccacaaatg gccatacaga aacacacaag tatgtgcaca ccgcacataa 1620
atgcattcta agatgcatgg ccaaactgg ccaggtagcg ttgctcacac ctgtactccc 1680
agcactttgg gaggccgggg cgggaggatc gcttggggcc aggagttaa caccagcctg 1740
gccaacccga cgagagctcg tctctactaa aaagatatac aaaaattggc tgggtgtggt 1800
ggcgtgcgcc ttagtgcag gctgctccgg aggtggggc gggagagtca cttgagcccc 1860
gggggcggag cttgcagtga gctgagatcg tgccactgca ctctagcctg ggcgacggag 1920
cgagactctg tctc 1934

<210> 404

<211> 2206

<212> DNA

<213> Homo sapiens

<400> 404

```
catgtgaggg ttccttggtc ccagcccaat tctcatgtcc cacctttctc cactaagaaa 60
cagccaaatt ttggcaagag tcgtggtagg aaaaaaaaaac aataattggg cagatgagga 120
tttttcgctt ttgactagt tctttctcta gactttcctg tctttttaaa acttctagtt 180
tcccccttga gcgctccctc ccagtgggta gaccacggaa ggaatgaaca ggggatggaa 240
gcaggggatg cagtcctat tatttcaata gattggaaag atgggcccag acaattgcg 300
tacggtgttc agtgtaaatt gaagatctgg agttgcagga ttgttgaggc aatTTTTtagt 360
tgctttgctc catctaaaca caaggccata ggatagtgtg actttgtagc ttcacaccg 420
tatccacatc agaagtacaa tgtccactta atacatatat acacatatgt atacacatat 480
acacatgtgc atatgtatgt atacacatat gcacatgtgt acgtatgtat gtatacacat 540
acatatatgt gtacacatat acatatgtat gtatacacat agatatatgt gtacacgtaa 600
acatatgtat acacataaac atatgtatgt gtacacatac atatatgtgt acacatatac 660
ttatgtatgt gtacacatac atatatgtgt acacatatac ttatgtatgt atacacatac 720
atatatgtgt gcacatatac atatgtgtgt gtacacatac atatatgtgt acatatatac 780
acatatacat atatgtgtac acataaatat gtatgtatcc atatatgtat atatatacac 840
atgtatacag atatacatct atatgtatac tctatatgta tgcacatata catatatgtg 900
tacatatata catatatgca tacatacatc tataatatat gtatgtgtat atatacacat 960
acagtgtcca cttaatatat atatctatct tgtgtgtatg tgtgtgtaaa tatacacaca 1020
catacacaca cgataaaata cagagtctac cacatgatga gcctctgcta ggtccttagc 1080
aatcaaacca catgtccagt cctggccccc attctacaac taaacacatg ggccagttta 1140
ggggtccagg agggcaagaa tgggtgggtcc acgtagaaac caggtgaggg aggagcagtc 1200
cacagggctg ggggtgatggg ctgggtgaagc agtgttccag gaggggaact gccgctcaca 1260
gggctgtcct ggtcgccctc gggatacagc cagacttgat ccgagtggct cccggggctg 1320
aatgggggacc gccgggtgca tatcccagga ggcagccttc agctcagtgg ggaaagcagt 1380
```

ttccaacctt agaactgccc aacactagca cagggcacct gagaaaggag gggccctct 1440
 gcctttactc tgtctccac tagaggcagc tggttcctgc agggaactct ggtggggggt 1500
 gagggggtgg ctggttctca gtgggcaggg gtgaccctac tggggtcagt gggctggcaa 1560
 tgctggtctt cactaacaag agttgaaaat agccaggaag ctaagccctg gctcctgggc 1620
 tcctgggcag atgcttaatt aggaggaaga aggaaccaa atcatgaacg caactggctc 1680
 tctcaggggg aggctgtcac cctccaagct cttcttcccc ttcctcaa at ggagattcac 1740
 actcatccct agttcaggag agccgccatt gatgatgagg aaatccgtgt caaagaagct 1800
 ggaaagactg ctattcattg tgagaatttt gtttccactg ctacattaca ttgtttcttc 1860
 ttgttttccc ttccaatttc cagttaagaa tctttcacag aaaattttta attttatcaa 1920
 aaactgcaca gatatcacac agctgcaccc ccatttgggtg acacaaagca tacccttctg 1980
 tgaagatttt cactttacgc caaggcatga ttgtcacttt acgccaaggc aataaatttt 2040
 taaaaatttt gtataacagg agctgaattc tgggttctca aatgtgaaat gtggcaaaaa 2100
 aaaaaaaaaa aaaaaagatt taattcaagc attttgtcat gtggttctta tttcttcaac 2160
 caagtttgtt tacagtcact gcctttgaaa tacagtcaaa tacatc 2206

<210> 405

<211> 2138

<212> DNA

<213> Homo sapiens

<400> 405

caaaagggtgc tgtgtgtacc ctttaggtac acccaacttt ctcccaaagg agccattttc 60
 tttgatctca gatggctgtt gcgtttacat ctttgggaact ataaactgtg gtggtacaaa 120
 ggttggttca tggtttgatt gtttacttct gaaggaaaagt atattctaga aaggagaaca 180
 ctaatttcca ttacaaattg gcagacagat aaaatttatt tgccaacatt ctacttttaa 240
 tgtagtggtt tgccttgccg ccatgcccct cacattgtta ctctgggcag ttcgtagccc 300
 tttggctctt gatggctttg tgtctagtaa taatgcaggg tgctcaagga aataaattca 360
 gtgtggatat actgaaaaca gactccctaa caggtgtgct agagcttgaa aaggagactg 420

cggtggatgt gtggtgtggc cctatcctca gagcactctc tgtcaggcag gagtcatata 480
cttgtgatac taatTTTTTT aggtaccatt gctctattaa tattcaaaca agcctttcac 540
cttgtactcc cacttctgag aattgaccct aatgaaataa tctaaaatat gacaagctat 600
ggagccttcc ttcagatgat cttactacca ttattcttac tggttaaaat ttgcatctta 660
aatgtataac tcaatgaatg acaaatcaat gaatgacatg tgtctgatgg aatgttatac 720
agctgttaaa caccatagtt taacaccacc ctgttaaact gcagttgcag tggctcacgc 780
ctgtaatccc agcgctttgg gaggctgagg caggcgaatc acttgaggtc aggagttcga 840
gaccagcctg gccaacatgg tgaaacccca tctctactaa aaatacaaaa attagccagg 900
catggtggca cacacctgta atttcagcta ctcaggaagc tgaggcagga gaataacttg 960
aacctaggag gtggaggttg cagtgaacca agaatacacc aatgcactcc agcctgggca 1020
acagataaga ctgtttcaaa aaaaaaaatt tttgtcaatg ttaaagaaaa gctaattattg 1080
gcaggaatgt ggtgagactg acatcctgac atacacaagc aggactgggg atcagtgtcg 1140
cctttctgta aagcactttt gcagtataaa tcaggagccc ttgaaagttc agaagctcta 1200
ttttttagt tcttgtgcta gatattttc cctagaaggt taaaaagaaa gaaaaaacgg 1260
ggaacgtttt aaaaaaatag cattatttat aataattaaa atcactgggc atggtggatc 1320
acgtttgtaa tcccagcact ttgggaggcc aaggcgggtg aatcacttga ggtcaggagt 1380
tcgagaccag cctgtccaac atgctgaaac cccatctcta ctaaaaatac aaaaattagc 1440
tgggcgtggt ggtgtgcacc tgtagtccca gctacttggg ggctgaggca ggagaattgc 1500
ttgaaccggg gaggcggaga ttgcagtga ctaagataac gccactgcac tccagcctgc 1560
atgacggagt gagcctccgt ctcaataaat aaacaaaaat tagctgggtg tggttgtggg 1620
cgcctgtaat cccagctact tgagaggctg agccatgaga attgcttgag cctgggaggc 1680
agaggttgca gtgagccggg atcacatgc tgtactccag cctgggtgac agactgagac 1740
tctgtctcaa taataataat aataataatc acagacaatt gatgtccagt gatatggaaa 1800
tgcttaagt aatgataata catccatact agatactatg acataatgca gccataaatg 1860
tcttaaaaaa aaaagacagt ctactctgt tgtccagact ggagtacagt ggcatgatca 1920
cagctcactg cagcctcaac ctctgggtt caagcagtcc tcctgcctta gcctttctag 1980
caatggcaat gtctcatatt tttttcataa tatagattgc ttaagaaata gtgtgacata 2040
ggacaggtgt ggtggttcat gcctgtaatt ccaagtactt tgggaggcta aggcaggagg 2100
atcacttgag gccaggaatt tgagacctca tttatacc 2138

<210> 406

<211> 2459

<212> DNA

<213> Homo sapiens

<400> 406

caatattttc	aatcccat	actcttctag	aagcttacta	cactgtagtc	ccattaaga	60
cccctgaggt	caggtcataa	aaggatatat	agctggcttc	cttttggttc	tctctcactc	120
ttttacttgc	tctcttgga	agctcacctt	tggaacctag	acgccatgtt	gtgaggaagc	180
tcaaactagc	acacatggag	aaaatctcat	gctaccagcc	tgccaggcagc	atcaggtggt	240
cagacatgtg	agtaggcaga	ctttcaaagt	attccaggcc	ctagatttca	cagagcagaa	300
acaagccatt	ggtactgttc	tgtggtgtgc	catgccaaac	ccctaacctc	ccgactccat	360
gaacatggat	tgtttatgca	actaagtttt	agagttatct	attgtgcaga	tataataact	420
agaacaactc	ttcaatttcc	aagttatgta	ctattgtcat	atattttatc	tgtatttgtt	480
gttttaattc	tgttgtcatg	tactttaatg	ttctttaatt	ctaagacttt	atatagtcag	540
tgtttgtgtt	tatacatata	catatatata	aaactttctt	tgcttttcat	tattttttgt	600
atctaagact	tactcctatg	ggctgaacgt	ttatgtcttc	ccaaaattta	tgtgttgaaa	660
ttctaattct	caaggtgatg	taatttggag	atggggcctt	tgaggggtga	ttaggtcatg	720
ggggcagagc	ccttataaaa	gaggctggag	atctctcacc	cctaccatat	taggacacag	780
caagaaggtg	ccatccttga	gctggcatgt	ggaccctcac	gagacactgc	atgtaccagt	840
gccttaattc	gggacttccc	aaccctctaa	aataaatttt	gtcacctat	aagccagttt	900
atcatgtctt	gttactgtgg	cctgaatgga	ctaaaacacc	atctgggata	aatttttatt	960
tgaaataact	gctttagaat	ttcattttgt	gagagtctgc	tggtggcata	cttgctcatg	1020
atttgttttc	tgaacatatc	tgtatttttt	cctcattctg	taaagatatt	tttgctgaat	1080
atagatgcct	aatttggcct	ttattatctt	tcagcacatt	ggcattggag	atattttttc	1140
attttctcgt	gacttcctct	gttggtcttg	agtcagctgt	cagcgtaaca	cttacacctt	1200
taaagaaatt	tatttttttg	ccaggagcgg	tggctcacgc	ctgtaatccg	aacacttttg	1260

gaggccaagc tgggtggatc acttgaggtc gggagttcgt gaccagcatg accaacttgg 1320
agaaacccca tctctactaa aaatacaaaa ttagctgggc attttggcag gcacctgtaa 1380
tcccagctac tcggaaggct gaggcaggag aatcacttga acccaggagg cagaggttgc 1440
agtgagccga gatcgacca ttgcactcca gcctgggcaa caagagcgaa actctgtctc 1500
aaaaaaaaa aaaatctctt tttttatctg ctttggtttt atgcaattaa tatgtttctg 1560
agtatggatt tatttttact aatcctgctt aagatttggt gagatcttta aatctggatt 1620
tgtgtctttg attactagtt ctggagaagt tctcaaatac tacttcacat ataacctctt 1680
cctcattatc ttttcttcta tggagattct cattaaacgt gatagacctt cagtgttctg 1740
tcttcagttt ttaacaccct ctcttctata tttttcaatt gttctttctt gtcatgcttt 1800
attctgtata atttatttta acccatattc cagtttactt acctcttcat gtgtttcttg 1860
tctacttaca gccatctatt ttgttgtggt ggtgggtggtg gtggtagttt tatttttcag 1920
tcctaaaagt tctgtttggt tctctttttt aaacctgcta gatcactttt atagttgttt 1980
attccctaca gatattttct aatatgtctg ttcttgaaac tatgagggtt gttttacgat 2040
ctttgctgct ttcagtttct gaaatgtctg tggccctggt tctgttggtt cttccagcta 2100
aatgtattgt cggctctcctg tgagactctc cacattggca aggccctggg ctttgatttc 2160
tgtttctctt gtcggttact tttccattta ttgcattcaa ctacaatgtg tcaccgactt 2220
taggaatcta ctttttaaaa gttttttata ttaagcactc taatttctta tagaatgcaa 2280
gaattcactc aacactttga aatgataaga aattagagct ctttagtctc atctacctat 2340
attttgacca actcaattgt aaaacccttg agaataatac atatgtgctg cttttataat 2400
ttttacatta acagtgattt atataaatac tcaatacatt tcaataaata cttaacatt 2459

<210> 407

<211> 2257

<212> DNA

<213> Homo sapiens

<400> 407

aaaagccgac gtggaggtga tgcgcgggag cacagatccg gggcagtgcg ctgcgcagag 60

gcgcgcggcg aagccgagtg ggcgcgggag tgacgtcacg gcgcgcgacg cggaggcggg 120
gtcgggcctg ggtccgacgg tagtgggtag cgggtctcgg gttgcgggtt gcaggttgca 180
agccgcaggc cccaggcaac tgccttcccc gcgccatgtt cggctccagt cgtggaggcg 240
tgcgcggcgg gcaggaccag ttcaactggg aggacgtgaa gactgacaag cagcgggaga 300
actacctggg caactcgctg atggcgccgg taggccgctg gcagaagggc cgcgacctca 360
cctggtacgc caagggccgg gcgccatgcg cgggcccag cgcgcaggag gaactggcag 420
ccgtgcggga ggcgggagcgc gaggcgctgc tggccgccct tggctacaag aacgtgaaga 480
agcagcccac gggcctgagc aaggaggact tcgcggaggt ctgcaagcgg gaaggaggcg 540
accccgagga gaaggcgctg gaccggctgc tggggctggg gagcgcaagg tgcgggcggg 600
tttccagggg agggcagcac tgggctcgat tgctcgggtg aggcggaccc ctgccgtact 660
gtcttcatcg ccatgtccct gcagtggctc cgtgggccgc gtggcgatgt cccgagagga 720
caaggaggcc gccaaactgg ggctgtctgt gttcacggta atccccgcc cgcctgacc 780
gcagcagggg ctaacagggg tggggcgggg cgggggcact gaacggagct ccccggggcg 840
ctgcggggcg tgggtgtggg ccggcccga gactcctccg cagagctcgc ttctcccga 900
gcatcaccgc gtagagagcg gcggggcccg gacctcggca gcctcggcca ggaggaagcc 960
gcgggcggag gatcagacgg aaagcaggtg aggtgtgcc acctgggcta gctgtgcccc 1020
ggggtggggg gtctcgggag gaccggagcg gctccactc gggcaggtgg cagcttctct 1080
tggcgaccg gcccgcggg tggcctgccc tactttactt cctgtcccag ttactcctag 1140
gtttttctct aggggagttt ctcgggtcac ccttgaagag aggtcctaag tactggcagt 1200
ggtcgggcgc tgtgccgtgg gagggcactc aggacctggg gcggggcctt ttcctgccgt 1260
gggtggcacc tccagggtt ctcttgatg gtgagcctgg gcctgacct aagagtggcc 1320
tgggtgggtg aggtaggaag gtgtcaacct gccaaaggca cggctggggt ggggcagggg 1380
cgtgctgtgg agatggggat attgcatctg tttctaacc acgtagccac tggccacgtg 1440
actacgtaac tgaggagtgg aattttagt ttgatttaac tgatttaaag acgcacttgt 1500
gggtggtggc ttcacttgga tggggcctgc ttgtgttcac tctcttggct tgcaagacta 1560
gggtctgagg cacacctgt atcctccttg tagttgtgag agccacagga aaagcaagaa 1620
ggagaagaag aaaaagaaaa agaggaaaca caagaaagag aagaagaaga aagacaaaga 1680
gcacaggcgg ccagctgagg ccacctctc tcccacatct cctgagaggc ccaggcacca 1740
ccacatgac tccgactcca actccccctg ctgtaagagg aggaagcggg gacacagtgg 1800

ggacaggagg agcccgctctc gcaggtggca tgacagaggc tctgaggcct gatggctgga 1860
ccctgctcac tgctgttgtg ggaccctgaa ccctcccttc accttgcttg cctcctgcct 1920
cggaagctcc ttgggtgtgg gtgaagcccg aggctgctcc tgtggaagtg gctctgggca 1980
ccagcctgtg gggctaaaga cttgacagct agctctggag cagccggctt cctggaaaac 2040
ctccaggttt cgcataccag ggatggcccc tggcttggcc tgcgaagggtg aacctgcccc 2100
gatttatcag tagaggctgg actccctctg tgcctgccc atggttgcag cagccatggg 2160
cctatgagcg gtctaactgt ggccaagtat ggtgacctct atttttcttt atattgactc 2220
tttgtatttc aataaatata ttttaaaagg aaggtat 2257

<210> 408

<211> 2130

<212> DNA

<213> Homo sapiens

<400> 408

attgggaaaa aaaaatgcat acatacatat acatgtgtgt ataccatata atatgtatat 60
acatgcatgt gtacccatgt atatgtatat acttacatgt atacacatat atatgtatgt 120
acatacatat ataccatata ctatgtatgt acgtacatat ataccgatat atatgtacgt 180
gcatatatac acatatatgt atgcgcgtac atgtatacgc atatatgtat gtgcgtacat 240
atatacacat tatgtgcatg catgtatgcg tgtatgtgtg tgtgcatgca tgtatgtgtg 300
tatgtacgtg cgcatacaca catgtgtttg tatgcgtgcg cgtgcgcaca tgtgtgtata 360
tgcgtacgca tacacacata tgtgtgtatg cgtgcgcgtg cgcacatatg tgtgtatgcg 420
tgcgcgtgca cacgtatgtg tgtatgcgtg cgtatatata cgcatatatg tatgtacgta 480
cgtatatatg ttttttatg ttttatgtat atgtatttta tatgtatata tatctgcaca 540
tccttcacta ttttcatgag gaaattggag ctgagggtac ttagttacct tgccaaaatc 600
atgtgactga atagtaacaa aagtttgggc ttaaaataag gaagactgat aataagtgtt 660
aagcttatat tcctgtctaa caatgacccc tggcaaagac atctgatata taagccacgt 720
ctgatatata agacgtgata tataagccag aggcaactgaa tgaacattgg cgaaatggac 780

aagaagggtg ggacacttat gtccagggac taggtgaaag tcctggagct tttggctttc 840
cagccacctt cccagcataa agaaattgta gctaaagtta agggaatgaa tagaagtatt 900
ggccaaaaga gaaattatit tgttgtttta gagatctggc cgggcgcgat ggctcacgcc 960
tgaaatccca gcactttggg aggccgaggc aggcagatta cgaggtcagg agatccagac 1020
catcctggct aatgcggtga aaccccgctc ctagtaaaaa tacaaaaaaa atagccaggc 1080
atcgtggcgg gcgcctgtgg tcccagctac tcgggaggct taggcaggag aatggcgtca 1140
acctggggagg cggagcttgc agtgagccga catagcgcca ctgcactcca gcctgggcaa 1200
cagagcaaga ctccgtctca aaaaaaaaaa aaaaaaaaaa aaaagggaga tccagaggta 1260
actttacagt tacattttca tcactgcttc tgtaaattta ctttagtaaa agctgtctat 1320
tctcacttta ttttccaaa tctcttaaaa aataatagtg attatgcttc aaggtttctg 1380
aaaatgcttc cacttgtggg aaattttgtt gcaaaatggt tttctttcta aacttacgct 1440
agttagttaa atgcaaatta aagttagtcg tcttaggagt tcatcatagc gtgagtaatg 1500
gtttgattaa tgacattttg gtagaggctc ttttttttt cataaaagtg ctcaatttga 1560
gatgacttgt tgcaagtata ctcatittaca ggtaagagtc agctccctat attctctcag 1620
agtcattgtt atggttatta ttgtaagtat ttacattaa tttaacagaa attttttctt 1680
ccctaactta taactcaact ttatgtaaat acagtgatca tcttataaaa atcaaattac 1740
agaatgtctt aaaatctgta aatttgactt tgttttaatg ttgaaactac aaattcacag 1800
aggcataaat ctaacatctt aattaaaatg tcaaccatat gcaagaagaa agatagaagt 1860
tatitagaaa gttaatttg aaaacagaat aatgaagcat tttaattgat ataggatttg 1920
ttagtatggc ttaaaatcag tggactagaa gtagctgtgt aggtggtggt tggcattata 1980
gttgcattta tatatgttct tattaatttc agtttcaaaa ttgtaagaag catatgcata 2040
tttttaaggt gacattgaaa agtactataa agattctaaa tatgttgttt ttacaaaaca 2100
aaatgtaaat aaattattga tttaaaatct 2130

<210> 409

<211> 1785

<212> DNA

<213> Homo sapiens

<400> 409

agtgccgggg	gaagctgcaa	tgaatcctca	gctctggggc	cagtggaggc	gctggggacg	60
gaagaagggg	agcggccggg	gtcactgagg	cagatgtggc	gctaccgctc	ctgggacgtg	120
ccacagatcc	catcagaggc	accccagaca	cagaaagcca	tcaccaagtc	gggcctccag	180
cacctggccc	cccctccgcc	cacccttggg	gccccgtgca	gcgagtcaga	gcggcagatc	240
cggagtacag	tggactggag	cgagtcagcg	acatatgggg	agcacatctg	gttcgagacc	300
aacgtgtccg	gggacttctg	ctacgttggg	gagcagtact	gtgtagccag	gatgctgggtg	360
agtgtctgta	ggggcacgcc	gccccctgct	ggtggagcca	gtagccgcag	cccttccggg	420
aacgtgggat	tgagcccgtc	ccctggcacc	cctgctgtgg	gccgccccag	gatggtgagg	480
ggtgcagggg	ctttgtccgg	atgccaggac	tggggcttcc	cagtgcacac	aaagggcagc	540
tgtgctgggg	caggcagcct	ccgagataga	cttacctggg	gcctcagggg	ccctctcttc	600
ctgtcctgca	gcagaagtca	gtgtctcgaa	gaaagtgcgc	agcctgcaag	attgtggtgc	660
acacgccctg	catcgagcag	ctggagaagg	tgggtgggta	gctcagcttt	gcccgccctt	720
gcccctttggg	tgctgaggcc	ctttcagcgc	gcactcacac	ccacatgtta	tacaaacggc	780
ctgccaggag	tgaccagca	ctcgggggtg	aagagtcaag	gaccctggag	ccaaatgcct	840
gcgttcgaat	cctggctcct	cactgattag	ctgtgtatc	cccactgcct	ggaacaaacc	900
tggcgccctag	tgggttcgtt	gaatatcact	caatggaatg	aattgacgaa	tgggtggccct	960
tgtaccatit	caccatgtcc	aaactagtgc	ttagaagagg	ccattgattt	gctgaagctt	1020
cataactcag	ctgtggctac	accctgcctc	tgtggagacc	tttccccaag	ggccattgtc	1080
cactgtgcat	ttgcagctgg	gggcatgtct	gggcactgtg	cttctagagg	tggaggcagc	1140
actgggcaga	cgggtcaagg	ccaggggcag	aagggttcgc	atggaggggc	agcgcttccc	1200
agcctgcaga	aaccaggcc	atcatacggg	agagactgta	agactaggag	tggttcaggc	1260
aggctcacac	aggctgcttt	cccagcctc	tgaattgtaa	agtgaggctt	ccttatacct	1320
ctaataaggc	tgaagtaggg	acagttatga	gaagggaaat	agaaatgcag	ccccaagcac	1380
tgtacactca	tcatttaagg	tggaaatcga	cctagggttc	cacaaattag	ctaaaggtct	1440
ccaggggcca	ggcagtgcaa	gtctgcgtgt	gaggaccagg	ctggctgcgt	gtgcccgggt	1500
cgggagtgcc	agagggcgag	gaagaaagga	tgcggccgag	tgcggtggct	catgcctgta	1560
atcccagcac	tttgggaggc	cgaggtaggt	ggatcacctt	gaggtcagga	gtttgagacc	1620

agcctggcca acatggtgaa accccatctc cactaaaaat cacaaaaatt agccaggcgt 1680
ggtgatgcac acctgtaate ccagctactc gggagggtgga ggttgacgtg agccgagatc 1740
gcaccactgc actccagcct gggcaacaga gcgagactct gtctc 1785

<210> 410

<211> 3061

<212> DNA

<213> Homo sapiens

<400> 410

caaaatcata tagaaattcc tggaaagaaa taatggcaat aataatcgta taagtagaag 60
ctggaaggga aaaaaagatg gtcattcagg aacctagaat ggcactttat ataattttaa 120
tgaagtcaac agtgtatata tagactaagg cgacaaggag ataaaacgtg taaagcagtg 180
tgtgtgtttt aaaggctggt caagaacgtg agttagaaga caatgctatg tacatttaat 240
aaaaagcaaa ggagaaggag gcagttgaag aaaaataaat gtacaaagag agaaacaagt 300
atctgaaata caaccttcca gattctcagg ctagcaagat gcctggcaga ggcagtgcca 360
gggccaagtt aacccatagc gggcagtcag tctcctttcc cccacatgga aaggatgaaa 420
tctcttccca gaaaataaga tgtgcaggag gaaagaggga gtggggtgag ggggaaggag 480
gcaaaaagcg agttgcccgc agacaagaat gtgtgtcggg ttcaagaaag ttcagtcaga 540
tgatcctcag tcgcctgact cactttgtaa cactttcact gacgctggag aggaggggga 600
aaaccagcc cccctttttc tttccctga ttatacccca ctatctccac acagccttgg 660
agtcagaaat gagcactcgg agcgggagat gccctgctgc tgcttgccac cggtgcggcc 720
cgtttgtaac ttgcaaagtt tgttgctttt gccctgatt cgggcagcgg gtcctgggat 780
gctcctgctt ccctcctgcc tcccacggag cccgggaaga gggctctgcct ccccatcccg 840
ccaccttcca gcatcagcct ctgaaaaatc tcacagagac atgcacgttg tagcaaaaat 900
caaatccgga aactgcttgt ttcagagaaa gaaatgaagt tgtcttttaa agaaaaactg 960
aattaggagg agagaaaagg gaaataggag aagaaaggaa aagttaaatt tgatttttct 1020
ccagagtttc cactaaaggg ttggggacag tgtgaaggag aaggggagct ttttacaat 1080

gcctttggtc tctgaacttc agtggcaaag aacagggatc aagttgaatg ttctcagggc 1140
tttggatcct agaggagaaa caatcagaag agcagaaatg gttatccctg tttaaaataa 1200
gccctcactc tttaccactt ccttaaagga gtggaggtgc tggtagtgat ggtagaggc 1260
aatgagggac ggagaagttg ctcccgtttc agagatgctt aaatgaaaag gaaagaaaat 1320
gcagtcaacc ctttctccag gaggtgcctc ctagctctcc tccctgagag gtgaagttgg 1380
gatggggcaa cgagagtcac acacacttag acaaggaagt ttccttcgga tcaactgtcag 1440
tccagacttg gttatctttg caaagtgtgg aaatctttgg caagtagctt tcttcgtaaa 1500
gttgatgagc ttctagggag cctgttttgc tgactttcaa agcactgggg caggttgtgt 1560
ggcaggtacc agttctgagg gcgctccaaa gatatccatc tccatccttt tttctctgtg 1620
gagatcttct gcaagttttg tcacgctgca cacacacaag gctgggggct atgtatctag 1680
gctgatctat ttgttttatt ttggtctgga aaaactaagc caattggggg agaacaatgc 1740
tttcttcgt agcagagcca gtaggctgct ggtgtccata gactgacagt ccaccaggac 1800
taagggtggg ctgaggattt taaactttac attgtttctc tgttaccaga taaaaataaa 1860
ttcacgtctt ccaccatttg ttttcaaata gggtaaaacc aagattaaag ttcctgctc 1920
aactgctatg tcataggttt cagtgtttcc cttccttctt aatttgctta aagaaaattc 1980
caagaggtta ttaaagacct tgatgccata ttaagaatat ttcctgggaa aaatgtatgt 2040
ctaccctgaa ggtaggaaag gagggcgttg ctagcctcta gcagtgccgc gtttattcta 2100
agatgtggga gattcttttc cttgcaacag tttttgtcat ctgcattctt ccaaggcttt 2160
taagggtgcat tttcttctgt gtgaaaggaa attctttgtc ctttctctc cagcacctgt 2220
gcttcccaag gtagacacta ttttgtgcct gtcacagaga gagggagtgc aggtttgcaa 2280
tgctcacaga caattgattg tctgccctaa tgtgtttcat ttacatgttt ataacgtcaa 2340
tggtgctggg gtgtccactg taccattcat tcccgcattc ccacaagggg gcaattgtct 2400
gaatggccaa gtcagacacc tttttgattg ctctttgggt gtcttttcag agcaaagaga 2460
taaaggagga aaatctgtga tgcagaaaca ctagttgaaa atatacagaa ttaaatgtca 2520
ccacaaaagc agatgttaac ataagcccaa atatgctttt tagccaagat gtgaagggtg 2580
aaaaaaataa ttcagagcag aggggaaggat gatttaaacc aataaatata gccctattcc 2640
ccctctttac ttttttctg tctttagcaa tcagaagatg aaatgtaatt ttccttttca 2700
tttttaagcc ttgaaacatc caggcacctc ctcattattt gtatgtttgc tgtgatttgt 2760
gaattttgta tatatttaca tagctctgtt tatgccaaca gcatcagctt accacttgga 2820

aaatctattg aatgactatt tgggctgtgg ggagggtaaa cttttaaaaa gtaagatcca 2880
agtatttctt catcaagcag tttttaaaag gaaaacgata ataatcagta ggctccatgg 2940
aagcctttgc cttaatagct atgtgccaaa tacttttatc ttgtgtgaca gtcatgtcag 3000
agtgaaatct ctcaggaaaa gtgtaactag tagttacaaa gtaaataaag gatttcattt 3060
t 3061

<210> 411

<211> 1909

<212> DNA

<213> Homo sapiens

<400> 411

gttgttgggg ccgtcgaggc ggcggcgact ctgcgtcccc ggctcctgat ggaggcgggg 60
ccgcatcccc ggccggggca ctgctgcaag cctggggggc ggctggacat gaaccacggc 120
ttcgtgcacc atatccgacg gaaccagatc gctcgggacg actatgacaa gaaggtgaag 180
caggcggcca aggagaaggt gaggaggcgg cacacgcccg cgccgacgcg gccccgcaag 240
ccagacctgc aggtgtacct gccgcgacac cgagggtgagg ccgcccgcgc cgctgcctc 300
cagcccgcgc gctcttcttg caacgcactc ccttctctta tagggaaaaa ccatttctta 360
ctcctaaggt tcagctcatc tcgtctcttt ccggaacctc cacctcagcg ctcccaaate 420
tccgctgaat gattctcacc aagaactggg acgactcata agccccagt taagcatcgc 480
tgtcagagta tcggggagcc agcaagaagt ttatctgccg gtttgccca ccgtgctgta 540
ttttagtaag gtgctccgct acctagcaaa gagaaagtct ggcacagcga tgagcgacca 600
gcacataatt gcggaatgaa ccagtaaat ggcccttccc cagcttctct gctacctaga 660
gatcacactg gttaatatat gacggtcaat ttttgtaag cattattact ttttttaaaa 720
tgtttttatt ttatttttga gactaggtct ctgtcgcccg ggctggagtg cagtgggtgcg 780
atctgggctt actgcagcct tagcctcccg agtacctggg accgcaggcg tgtgccacca 840
cgccggttaa ttttggtatt tcttgtagag aaggggtttc cccggctggg cgcggtggct 900
ctcgcctgta gtcccagcac tttgggaggc cgaggcgggc ggatcacgag gtcaggagat 960

cgagaccatc ctggctaaca tgggtgaaacc cgtctctac taaaaataca aaaaattggc 1020
cgggcgtggt ggtgggcgcc tgtggtccca gctactcggg aggctgaggc aggagaatgg 1080
cgtgaacccg ggaggcggag cttgcagtga gccgagatcg cgccactgca ctccagcctg 1140
ggcaacacag caagactcgg tctcaaaaaa aaaaaaaaaa agagagagag agaggggggtt 1200
tctccacgtt gtccaggctg gtctcgaact cctgagctca ggtgatctgc ccgcatcggc 1260
ctcccagggt gctgggatta taggtgtgtg ccactacctt tgtaggcat tagtgaaagt 1320
gcttttagat cttacgtata ttaattcatt gagtctttat acaacctcat aagaaagctt 1380
ctgtctgttt cacagtcagg aaacaggcac agagagggtta aacaacttgc ccaagatctc 1440
agctagtaaa tggcagagcc tggatttgaa ccaggcaga gctctatcca cccttctgct 1500
ttccagtact ttttgctaga caaatgtgca ttgtgtacct actgtgtgac aggattgtgc 1560
tggcctcaga gcagggatgc aaaggtaaata aagtccttga ttggcagcac accaaatgct 1620
tacactggtc cgggcgcggt gattcatgcc tgtgaccta gcagtttggg aggccgaggt 1680
gggcggatcc cttgaggcca ggagttcgaa attaacctgg acaacatggt gaaaccccat 1740
ctctactaaa aatacaaaaa ttggccaggc gtgatggcgg gcggctgtgg tcccagctac 1800
ttgggagggt gaggaaggag aattgcttga acctgggagg cagaggttgc ggtgagccga 1860
gatttagcca ctgcactcca gcctgggcaa cagagcaaga ctccgtctc 1909

<210> 412

<211> 2977

<212> DNA

<213> Homo sapiens

<400> 412

tttttttgca agaaacatgg taaatgggaa gaaatgccct atatgcaatg ttttatggcc 60
ctctatcaaa accctgcctt gcagatgaaa tgcagaatat gtaaattggc caaagggaac 120
tatattgcca attctagaag cctctggaga ggaagcatca gtcattgtggg ggcctatagg 180
gaagggaaca agtaagaaga gtccctttac taccctctcc aagagaagtg aggccctcta 240
actctactcg gggactggaa ccttggccaa tacaggggca tagtccacct tcttggaaat 300

ggtaccctct gcacctccag ggaaaagcaa gggcccgttc tgtatttgcc aggccctcca 360
aactctgcag agccagctgt ggctcctgct atggcaatag caggcccctg ttgcactctt 420
ctttgccagg gagcaccact catagtggga acgcatataa ccctggaggg tgactgttgc 480
cactcagagc atgcctgttg gagaaagagg ttttgctcgg gtctatgtgt tttttaaaac 540
tgttgacttg tataactgga aatcccatag taagggtta tgggtgagcc cacgagagtt 600
cgtaactctc atatggagaa tattctccac acataaccct acctggccag gtgtgcagac 660
cgtaacagca accctgctca cagcagaaga taaatctgcc accatggcca aaactaagga 720
ggaggcagac aatatgtgtg ctgataacct ggtgacctgg cccgttgagg tgtcagtcce 780
aatagccaac ccaaactggg accccagtga taacaagaat caagagtggc ttcattatta 840
taggaatatg cttctcagag gtatgaggga agcaagccag tccctggtca attggggaaa 900
tctcagagaa atagaacaag gccctaataa aaatccatca gcattcctaa attgataata 960
agaatgcctc cagaattaca ccccttggga cccagatgac ccaaagctg agtagtactt 1020
taatctcact tcattcttca gcccagata ttcagagaaa actctaaaaa gtggcaataa 1080
atccacatac tcccccttc caactggtag acatctcctt taaggtctat agtaaagaga 1140
tgtggcatct gatgaaaagg aagacaagaa gatgcggcag ccctacagac tacttcagga 1200
agcccaggaa gaagatggca tgggtgagtg accaggggccc ccaccatgga actcaggggcc 1260
tgcctacact ggggccc aaa caatatgctt actggaagca gaaaggatgc taggaaaggg 1320
aatgtccaaa tcattccccag agagggaagg aggaggacaa gcccaggta cctgttcct 1380
gtaactggac aagaaactga tggatgggga catggggctc cctgcctggc tcctcaaaac 1440
aagatccaca tctccccaa ggagccccag gttacacaga agaagggggg caaccagttg 1500
gatttttttt cgtttgtttg agacagggtc tgtgttacct aggctggagt gcagcacctg 1560
gatcgtggcg cactgccgcc tccaactccc aggtcaggc agtcctcca ccttagcctc 1620
tcaggtagct gggactaagg cacacctggc tgattttttt gtttgtttgt ggagacgggg 1680
tctcgttatg ctgtcagggc tggctttgaa ctcctgggct caagtgatcc tccagccttg 1740
gcctcccaaa gtgttggcat tacaggcatg agccactgct cccggccacc agctgagttt 1800
ttgatcaaca ctgtagccat gttttctgtg ttgatcacta aaagtggacc ctatccagga 1860
agaaatgtat ataagggtg tgtctcataa aggaaataaa agattcttgg agcctctggt 1920
ccatgaaata gtatctaaaa ctttactca ttctttcttc tgttcccaa acatccatt 1980
ctccttttgg gaagggacct tctgactaag ttggagcca caatttctt aaatcaggac 2040

agaatagagg tgttctgagc ccatggcact gccatgctgg ccctagttcc tggggaagtt 2100
 ccagacttgg ggcctcatat gactccttgg ctaatgcggt actagataat tgtatagcat 2160
 tagactgcct cttagcagaa cagggaggag gagagtgtgc agttattaat tcctcttgct 2220
 gtacctgaat aaatacctca ggggaaatag gaagttaaca ttaggaaggt ccatgcccac 2280
 gcctcttggg tccacacttt taatcagcag ccatatTTTT tttttttttt ttttttgaga 2340
 ctgtctcgct ctgttgccca ggttggaatg cagtggggca cgatctgggc tcaactgaac 2400
 ctctacctcc tgggttctag cgatttttct gcctcacctt cctgagtagc tgggactaca 2460
 ggtgcgcacc accacacctg cctaattttt gtatttttag tagagacggg gtttcgcat 2520
 gttgccagg ctgatcttga attcagggtg atctgcgcgc cttggcctcg caaagtgtg 2580
 ggattgcagg ggtgagccac cacatcaggc ctaatagcca tacttctaata tctgtttgag 2640
 aagttctcaa attagcaata ccaagtgtta cttggtttct tcccctaata aggccactaa 2700
 ttttattgct ctactactg ttgtttggc cctgcatctt taacctcttc gtaaaatttg 2760
 tatcttccag attagaaaaa tttcaactgt aggtgccttt gcaacctatc ctgggagacc 2820
 ctaaaacata tttagtttta gtgcctagag attttcactc ctctaacatc tctggataca 2880
 gtgtccctgg tcaacatgaa gaagttacag aagaacgctt tctgatcctg gccccataag 2940
 aatttacttg tgctaagtaa taaaattcct attgatc 2977

<210> 413

<211> 3241

<212> DNA

<213> Homo sapiens

<400> 413

agttgtccg gcggcgctcg gggagggagc cagcagccta gggcctaggc ccgggccacc 60
 atggcgctgc ctccaggccc agccgccctc cggcacacac tgctgtcct gccagccctt 120
 ctgagctcag ctgcaggagg ccagcacctc aagactgctg agcgtgggag gggaggcctt 180
 ctctggaggc accagcacct tcaactgtac tgcccatcgg gccagcatg agctcaactg 240
 ctctctgcag gaccccagaa gtggccgatc agccaacgcc tctgtcacc ttaatgtgca 300

atgtgagtgg ccctgaggtg ggcagggaga taggttcttt gccagggac cccagcacc 360
caccaggcag gtggtccgca ggacatttag cagacactta agcactttgc aaatatgaac 420
tcatttgatc ctctgagtaa ccccatgagg tcattactat tgtcgtcacc attttacaaa 480
taagaaaact gaggcagaaa gaggtaagca atctgcccag ggtgatgatc ccgctggtaa 540
gaagcagagc caggattcac atctgggcat ttggctctag tatttacact cataatcact 600
ccgaaatgct gcctctctgg cagaccacgc catcctgttc ctcagcatcc cctctgagga 660
gaggcccagg cccctggctc ccatctgggt ttgggaagaa agggctagaa gtatgagggg 720
ctgtggtgag agcatattgg cctctgcttt gtaccagtca agccagagat tgcccaagtc 780
ggcgccaagt accaggaagc tcagggccca ggctcctgg ttgtcctgtt tgccctggtg 840
cgtgccaacc cgccggccaa tgtcacctgg atcgaccagg atgggccagt gactgtcaac 900
acctctgact tcctggtgct ggatgcgcag aactaccct ggctcaccaa ccacacggtg 960
cagctgcagc tccgcagcct ggcacgcaac ctctcggtgg tggccaccaa tgacgtgggt 1020
gtcaccagtg cgtcgttcc agccccaggt gagcatggcc aacaagcggc cctgcaaagc 1080
ttcaggtggg ctcaggggtc ccgtcccat acagaaatgg gaatacttgt tgccctgtgg 1140
ttgggtcttg tggatgaact gtccccagcc accctgggca aggagggcag agtagtacct 1200
atggcatgtt ggggctgggg cactaccac ttgggacctg acacagagga catcctccag 1260
ggcttctggc taccgggtg gaagtgccac tgctgggcat tgttgtggct gctgggcttg 1320
cactgggcac cctcgtgggg ttcagcacct tgggtggcctg cctggtctgc agaaaagaga 1380
agaaaaccaa aggtaggcca gggacactgg gggcagtgtg gatgaggtca ggctgagcag 1440
cagccaagac agcaagtgc gctgggcaga accagtcac tctgacggtg gcagagcact 1500
tccagggggt ggccatgggt acggtgacat gcatcccagg tagcagggtc aagcactggg 1560
aaccagtct ctggccccag ggccaggcct gggcatttga gagaccctt gcctgagggt 1620
cctgggtctg aaagggtagg acagcccagc gtgggagggc aactgagaa ttagggacat 1680
ggtttctttc tccacaggcc cctcccggca cccatctctg atatcaagtg actccaacaa 1740
cctaaaactc aacaactgc gcctgccacg ggagaacatg tccctcccgt ccaaccttca 1800
gctcaatgac ctactccag attccagagc agtgaaacca gcagaccggc agatggctca 1860
gaacaacagc cggccagagc ttctggaccc ggagcccggc ggctcctca ccagccaggg 1920
tttcatccgc ctcccagtgc tgggctatat ctatcgagtg tccagcgtga gcagtgatga 1980
gatctggctc tgagccgagg gcgagacagg agtattctct tggcctctgg acaccctccc 2040

attcctccaa ggcacccctct acctagctag gtcaccaacg tgaagaagtt atgccactgc 2100
cactttttgct tgccctcctg gctgggggtgc cctccatgtc atgcacgtga tgcatttcac 2160
tgggctgtaa cccgcagggg cacaggtatc ttiggcaagg ctaccagttg gacgtaagcc 2220
cctcatgctg actcaggggtg ggccctgcat gtgatgactg ggcccttcca gagggagctc 2280
tttggccagg ggtgttcaga tgtcatccag catccaagtg tggcatggcc tgctgtatac 2340
cccaccccag tactccacag caccttgtac agtaggcatg ggggcgtgcc tgtgtggggg 2400
acagggaggg ccctgcatgg attttccctc ttcctatgct atgtagcctt gttccctcag 2460
gtaaaattta ggaccctgct agctgtgcag aaccaattg ccctttgcac agaaaccaac 2520
ccctgaccca gcggtaccgg ccaagcaca acgtcctttt tgctgcacac gtctctgccc 2580
ttcacttctt ctcttctgtc cccacctcct cttgggaatt ctaggttaca cgttggacct 2640
tctctactac ttcactgggc actagacttt tctattggcc tgtgccatcg ccagattata 2700
gcacaagtta gggaggaaga ggcaggcgat gagtctagta gcaccagga cggctttag 2760
ctatgcatca ttttctacg gcgttagcac ttttaagcaca tcccctaggg gagggggtga 2820
gtgaggggcc cagagccctc tttgtggctt cccacgttt ggcccttctgg gattcactgt 2880
gagtgtcctg agctctcggg gttgatgggt tttctctcag catgtctcct ccaccacggg 2940
accccagccc tgaccaaccc atggttgcct catcagcagg aaggtgccct tcctggagga 3000
tggtcgccac aggcacataa ttcaacagtg tggaagcttt aggggaacat ggagaaagaa 3060
ggagaccaca taccctaaag tgacctaga acactttaaa aagcaacatg taaatgattg 3120
gaaattaata tagtacagaa tatatttttc cttgtttgag atcttctttt gtaatgtttt 3180
tcatgttact gcctagggcg gtgctgagca cacagcaagt ttaataaact tgactgaatt 3240
c 3241

<210> 414

<211> 3211

<212> DNA

<213> Homo sapiens

<400> 414

atTTTTgcct gccaggagtg ggtgagggag gagcagccgc cgccttcaca gacacctggt 60
agtgtcagga gagggcatgc actgccctgg tgaggctcct ctggctgccc ccaggcccac 120
acccaaggat ccctgcctca gaaacgtgct ggccaaagcg ctctatgaca atgtggccga 180
gtccccggat gagctctcct tccgcaaggg tgacatcatg acggtgctgg agcaggacac 240
gcagggcctg gacggctggt ggctctgctc gctgcatggg cgccagggca tcgtgcctgg 300
gaaccgcctc aagatcttgg tgggcatgta tgataagaag ccagcagggc ctggccccgg 360
ccctcccgcc accccggccc agcctcagcc tggcctccat gccccagcgc ctccggcctc 420
ccagtacag cccatgctcc ccaacaccta ccagccccag ccagacagcg tctacctggt 480
gcccactccc agcaaggctc agcaaggcct ctaccaagtc ccgggtccca gccctcagtt 540
ccagtctccc ccagccaagc agacatccac cttctcgaag cagacacccc atcacccgtt 600
tcccagcccg gccacagacc tgtaccaggt gccccaggg cctggaggcc ctgcccagga 660
tatttaccag gtgccacctt ctgccgggat ggggcatgac atctaccagg tcccccgctc 720
catggacaca cgcagctggg agggcacgaa gccccggca aaggtggtgg tgcccacccg 780
cgtggggcag ggctatgtat acgaggccgc ccagccggag caggacgagt acgacatccc 840
gcgacacctg ctggccccgg ggccacagga catctatgat gtgccccga ttcgggggct 900
gcttcccagc cagtatggcc aggaggtgta tgacacaccc cccatggctg tcaagggtcc 960
caatggccga gaccgttgc tggaggtgta tgacgtgccc ccagtgtgg agaagggcct 1020
gccaccgtcc aaccaccagc cagtctacga cgttctcca tcggtgagca aggatgtgcc 1080
cgatggccca ctgctgcgtg aggagacctc cgatgtgccc cccgccttcg ccaaggccaa 1140
gccctttgac ccggccccga cccactggt actggctgcg cccctccag actccccgcc 1200
ggccgaggac gtgtatgacg tgccgcccc ggctcctgac ctctacgacg tgccccctgg 1260
cttgcggcgg cctggccccg gcaccctgta cgatgtgccc cgtgaacggg tgcttctcc 1320
tgagggtggt gatggtggcg tggtcgacag tgggtgtgat gcggtgcctc cccagctga 1380
acgtgaagcc ccagcagagg gcaagcgct gtcggcctcc agcaccggca gcacacgcag 1440
cagccagtct gcgtcctcct tggaggtggc agggccgggc cggaacccc tggagctgga 1500
agttgctgtg gaggccctgg ctcggtgca gcagggtgtg agcgccaccg ttgccacct 1560
tctggacctg gcaggcagcg ccggtgcgac tgggagctgg cgtagcccct ctgagccaca 1620
ggagccgctg gtgcaggacc tgcaggctgc tgtggccgcc gtccagagtg ccgtccacga 1680
gctgttgag tttgccccga gcgcggtggg caatgctgcc cacacatctg accgtgcct 1740

gcatgccaag cttagccggc agctgcagaa gatggaggac gtgcaccaga cgctggtggc 1800
acatggtcag gccctcgacg ctggccgggg aggctctgga gccacccttg aggacctgga 1860
ccggctggtg gcctgctcgc gggctgtgcc cgaggacgcc aagcagctgg cctccttctt 1920
gcacggcaat gcctcactgc tcttcagacg gaccaaggcc actgccccgg ggcctgaggg 1980
gggtggcacc ctgcaccca accccactga caagaccagc agcatccagt cagcacccct 2040
gccctcacc cctaagttca cctcccagga ctgccagat gggcagtacg agaacagcga 2100
ggggggctgg atggaggact atgactacgt ccacctacag gggaaggagg agttttagaa 2160
gaccagaag gagctgctgg aaaagggcag catcacgcgg cagggcaaga gccagctgga 2220
gttgacgag ctgaagcagt ttgaacgact ggaacaggag gtgtcacggc tcatagacca 2280
cgacctggcc aactggacgc cagcccaacc cctggccccg gggcgaacag gcggcctggg 2340
gccctcggac cggcagctgc tgctcttcta cctggagcag tgtgaggcca acctgaccac 2400
actgaccaac gccgtggacg ctttctttac cgccgtggcc accaaccagc cgcccaagat 2460
ctttgtggcg cacagcaagt tcgtcatcct tagcgccac aagctggtgt tcatcgggga 2520
cacactgtca cggcaggcca aggctgctga cgtgcgcagc caggtgacc actacagcaa 2580
cctgctgtgc gacctcctgc gcggcatcgt ggccaccacc aaggccgctg ccttgacgta 2640
cccatcgcct tccgcggccc aggacatggt ggagagggtc aaggagctgg gccacagcac 2700
ccagcagttc cgccgcgtcc taggccagct ggcagccgcc tgagggtggt gaccccagga 2760
gggaggcagg ggaggggtgc ggcggtccca gctccctggc tcccatgtca agagtcgctg 2820
tgccacaggc ttagggacag gaccccagct ctgcgtcgtt cctggtgccc tggatgcccc 2880
ggaatctgta tatatttatg gccgggcagg gtgtggggcc atgcctcctc aggagccgaa 2940
gcccaggggc cggccagtgg ctttccccag catgcaccac gggcccgggt tgggtcacca 3000
gacggggctg gagtgtgagg gtcctgcagc ctgcaggacc tcgtgccacc ccgagggctg 3060
agcctggtcc cacgagggtg ccgtgtcccc tgacagggcc agtgcagttt ggtgtgtcct 3120
ccgccttacc aggagaagaa cctgaagaac tatttttcgt tattggtttt ccaatcattt 3180
gactaagagt ctccatttaa ataaagtttt t 3211

<210> 415

<211> 2428

<212> DNA

<213> Homo sapiens

<400> 415

```
ttttatttgc taaatctggc aacactactc agttggctac tttggaacgt atcgactaag 60
ttttgtgggt cttttattgt catgccaggt gggggaaatc tgagaagcgg taagaatttt 120
gtgctttttc ctgaaaaaaaa aaaaaaaaaa aaaaaagacc atcgagttag acgtaatttt 180
ttttttttga gatggaggct tctgtcacc caggctggagt gcagtgggtgc aatctcggct 240
cactgcaact tctgcctccc aggttcaagc aattctcctg cctcagcctc cagaatagcg 300
gggattacag gcgcccacca ccatgcctgg ctaatttttg tatttttagt agacacaggg 360
tttcaccagg ttggccagac ttgtctcaaa ctcttgacct caagtgatct gcctgcctca 420
gcctcccaaa gtgcggggat tacaggcatg agccactacg cccggcgaga gagagacata 480
aatcttaaat gaattctgaa aagaagtata atttgaggta taagtgcata ctgaggaaat 540
aacaaccctc aatagagaaa gagctcaaaa ggaagcgagg agctggttta agtactttca 600
acttcacaaa cgtcttggga ccgctccctc aagaactgca ggtgtcgggtg tatgtagctg 660
taacatttgc tgcttgtcat cacattttcc atgaagagtc aaaggcaaac actaccctgg 720
taccatatac aattaaaata aggagaggaa attgttgggtg tgaaacttgg ctttagctca 780
aaatgttaca ctttgtcaa tagagctcca gactacagct tagaccaatg agtcttaacc 840
ttttcaaaaa tgaggactcc tttggatgaa aatttcatcc tgcttgatag taatattttt 900
agtgtgagta taatgaggga aagctataac gtgatgcttt taaatgaatg ggctttttat 960
taatcatgac aatatacaca aacattttaa attatttata catacatgtg tgaaacattt 1020
gaaaactatt cacacatata tatgtacaac cttctgagtc cccaacagg actctgagtt 1080
cacaagcagg ggagcagggt tagactatct ttatgggggg acaataaaaa ctggagtcgt 1140
ttgatgaggt aagttcgact attctgtttc tctccaaatc cctctgaaac cattaccaca 1200
cacttggagc tggaagcacc cagtgaatga gaggctttca agatcttcct ttccctcgag 1260
ttcttgcagg tctgggtcta tgagagaaaa ctgggagaca tcagtagagc tgccatcctg 1320
tgaagtgggg gcaaaaaggt ctactcaagt aggtcctta tgtccatcca ttataaatc 1380
tccctctctt gcttgattac aagaaaccca gaagaggggg tgattagaac acctactcca 1440
ttccattatc cagattgcta catacaccat gaccatttct cacttacctt ttattttcag 1500
```

gcagatctaa caatatagat gagcaaatcc ctggattatg tgcattagaa ttagaaatcc 1560
 agtctcattt tcaaagtttc ttaccagatg cttattacct accttgcagg attaaatgag 1620
 atcaagggtta tgaaaagttt ttgagaacag taaagtggat gcaaattaaa gtggcatgat 1680
 tattcttcgg aaggatcagt gtgtcagata tactcaacaa gggtggggtg aaatggggct 1740
 gctgaagagg gcagaccag caggtgcacc tggcacctga gcaacagagt ggactagtgg 1800
 gctagaggag ctagaaggac ttcagacagc atctaactcg gcttgtctca gacttggtgt 1860
 tctcaggacc cctctacact ttttaataatt attgagaacc taaaagggtt tttgtttatg 1920
 tgggttatat ctatcaatat ttaccgtatt ggaaattaaa ctgaaaacat tgttaaagat 1980
 tcatttataa agaataaaac tctactacatg ttatcataaa taatattttt tacaataaat 2040
 attttccaaa acacaaacag tctagtggga aaagtgcacat tgtttcacat ttttgcaagt 2100
 ttgtttcata tcttgcttac tagaagacac actctcacac ctgcttctgc agtcagtctg 2160
 ttgcgatatc atgcaccatg tagtctctgg aaaattccac tgtaagcatg tgagaaaatg 2220
 aaagcaaaaa aatcaaataa catattagct ttatcataaa aataattttg acgtcattga 2280
 ttccaagct tctccagacc acactttgag gactattgat cttactcagt gataagagct 2340
 ttcatgtaga ttgattcaac tgcacctcac aaagttttta aatgcctttg attatcccta 2400
 ttacacactc agggaaagta atccttgg 2428

<210> 416

<211> 1717

<212> DNA

<213> Homo sapiens

<400> 416

caccggagga gagactcatc taggccagcc tggctgctgg caccagcacc tggaggctct 60
 gaatggtttc tacctggaga cccaaggaag ctgcttccag ggctcgggac attgctacgg 120
 aagtgtcccc ttggctggca gcctctgcct ctgcctctgc cccatcctgg atggaggacg 180
 aggggagcaa ctcagggaag cagaggccta gagaggctgc ggacttctcc atcccacct 240
 cggggttccg ccttggcagg tgtacggctg tgcgtgggag ggcacacgtg ggttcacagt 300

gtgttcagga gtgtgtgtat ctggaggagt gtgtgtgtga gtgtgtacct gggcctgtgt 360
 tagtctgcag atgctagtgt gagtgtgtcc tgacatggct ccaggggcgtg tctgccgtgt 420
 ttactgtgtg tctatgactg tgatgggtgt agctgatccc aggaggtggc ggctgcgcca 480
 tgggggtcaac cattacagtc ctagggcagg ggcgcccaaa ggctgcatgt tctccaggag 540
 gccaggccgg ggttgcccag gcacctcctt ccccgccctt gggggctgct cctgctgtgg 600
 aggcagctgg gaagtcaggg aaggccacta gcagaggctg agtgggcttc tggctcctag 660
 aacaaatgtc cttcaggca ggtctgtctg ccagaagcca gagccagtca tgcgagggaa 720
 ccacagaccc acccgcccc tcagccggag cagcccagg gagcagagga ggggctgcct 780
 ggagcttccc accctgctgt ggtcatttgt caaaggggga aggcacccac tgcctacctc 840
 acagggtgtg tgtgaggatc agagaggacg acagtgggga aagaatctgg aagtcttcaa 900
 ctgccgtctg atgggaagga ccgtctgggt gtccttctgg gatgaggatg acagagcaac 960
 ccttctcctg ccctgaaccc cccccagctc acctgaccac ctctggttct ccagctccgg 1020
 tccttcctag cagcctggtg agctcactcc ttcccctgat gactggctgc ctctacacag 1080
 actcggcgag aggacttgaa ggaagccctc tgggttgtct gctgagtaca ggggctcagt 1140
 gaacactggc gctgcctctg agtcggggct gggcctgcag aggccgactc agaggagact 1200
 ctgctgcttg ctcccagccc cttccccggc gatgcccatc aactgtgac ctcccatccc 1260
 tgaagggcac ctgcctgagg gcctggcctc cttccagctt catggacctg gagatgtgcc 1320
 ctttcacct tctgcttcc caggccagta gatccgttta cacttttggg tcgacagtca 1380
 gcttttcctt ttggttttgg cgggtcccag aggcattgggt gtccagtcca atgtggggag 1440
 ccacgtgaca acgtggggga ctgggacatg ggactgggaa gtcagcagac gctgggatag 1500
 agagggccct gaacaccagg ctcaggggct tgcttggctc ttatcctgta ggaggtggga 1560
 ccaccttcc ctgaactttc tctacaaccc ttgggagcgt ggggaggagg cggctggttc 1620
 cagggtcagt ttactaagtt agagatttgg aaaacctgtg tcagctgtaa ctctaggat 1680
 attttatgtg gaacctaaca tgcagatgaa agctggc 1717

<210> 417

<211> 2613

<212> DNA

<213> Homo sapiens

<400> 417

tcctgtgcag	gacagcttct	atccctgtca	cttaacaatg	gagaggattc	ttccccagct	60
tccttccaga	ggacacaaaa	gctcagagct	ccacagtcta	gagtctagac	caacaggcct	120
ccacactcac	gtcccagaga	tttccctggg	cccacctact	cccagtggca	accagacttc	180
tgcacatagg	agagatgtca	tactcagagt	ccagcctccc	acatccacag	gaccacctct	240
tcctcctctg	agtcttggtt	atagggccat	cccctgcctt	agacctggcc	cagtggactc	300
tgatcttaca	gccaatatgg	ggcagcaaag	tgggacatct	gtctacaggg	ccagtagccc	360
caggtcctct	gcttgccaaa	aggaggggga	ccagcccccg	gggggagccc	agagctcggc	420
agggctgggg	ttagtaagaa	gagaaaacag	ggttagtagg	ggctgggtta	gtaagtcaga	480
gcacagcacc	agcggacagg	gcacctcagc	agacacacac	aggagtcgct	aagagaaaag	540
gaagaacgca	cgcaggtccg	ttagtatgtt	aagggatgat	cggggtgcag	ttgaggcacc	600
ccaggggtta	gacgggttag	taatcgaaca	aaagagctgc	ctacagaaaa	gaaagctgag	660
acggaggaag	aatgtgggga	agtgacatgg	attcaaagcc	aagtgtcttg	ccccaggcag	720
aaggatctgt	gtgcagaaca	cccagagagg	ccagggccta	ggcagcagac	gtgttcaacc	780
aggtttgagg	ggccttcttc	cctctcata	cttttttttt	ttttaggtgt	ctgccatgtg	840
ctgagaccct	tatattgacg	ggaatcctca	ctgcaacctg	taaggtatca	gaactcgcct	900
tctaccactg	aggaaactga	ggttgagaga	agtgagggtga	cttactcaaa	ctcactcaac	960
aggaagtggc	agagctgaga	aaaggccatg	tgaggacata	gtgagaaggt	gccacctgca	1020
agccaaggag	agaggcctca	ccagaaacca	agtcttaaca	ccttgatctg	gactttccag	1080
cctccagaac	tggcagaaaa	taaattcctg	atgtttaagc	catccagtct	ggcatggtgc	1140
tgtggcagcc	caagctgatg	aatagtacac	accactccgc	attctgggaa	aaaggacatc	1200
tggcttttaa	acttgcctaa	gggaggccac	aagctgctct	cttgcaaacg	ctgggactgt	1260
cccccttgga	gggagctgga	attgcagatt	gtggggcctg	tcctgccacc	ttctgttccc	1320
caagaacaga	atccaggagc	agtgaacta	gaagcagcga	tctgattgga	gaagagtgtc	1380
ctgagactgg	gctaaggtga	ccccttaagc	ctttgggatg	gtgcactctc	agccccctctg	1440
gctgccccctc	ccagagttca	acagcacagg	gggaaggctc	cagctcctcc	cagatcctga	1500
ctgtctcctc	tttgtaacca	tcagggagag	gaaaagcatg	gaaaagcccc	accaaggaag	1560

tccccacaa aatgacaatt acgcactgag caaatggaga caaaggactc cagccagcgg 1620
cacccgagga gctgcatctg ccctctgcct gacagcccct ccccgactcc catccttggt 1680
cctgtcccca tcctgtaggg tcctttgaga cccagccttg gggaaagtgt ggtcagtggg 1740
gacttggccc aggccaggct ctgtctggtc accgacagaa acgcgaggag gaatcaagtt 1800
cacatggggc aggaaagggc cccagaccc agacaatagg gcccagcagg cagggcccga 1860
gcaggtgagg agggagtagt gggctgccag gcctccctca tacccttga gctgtcctcc 1920
agagccagat cagtcactctg ctgagcatca accaggaaga gttcctatcc atgggaggct 1980
ccatcccaac aggtgtgaag aggatgagat cttcaggag tcacccagcg ggctagaaaa 2040
ccaccggagt ctgaccgcta agtcactgtg gccagaatcc aaggtcacc gaggtccaaa 2100
gagaagtcca ggccaggagt cctggagatg cggcccagat ggagccacct gggggagaag 2160
acagcgagtg aggatgaggc cacagcctcc atccccact tcccacatcc cccagccta 2220
attctgcatc tgaggggact catgttcaga gatccccca gtctctcatg ccccagcac 2280
acacacaggg tggaagtgag ggttttggac atgaaacatt tttagaagaa acttaggcca 2340
ggcacagtga ctcccacctg taatcccagc actttgggag gctgaggaag gaggatcact 2400
tgagcccagg agttcgagac cagcctgggc aacataatga gactctgtct ctacaaaaaa 2460
taagccaggc atggtagcat gcacctgtag tcccagctac ccaggaggct gaggtgggag 2520
gacgtattga gccctggagt tcaaggctgc agtgagccgt gatcataaca ctgtactcta 2580
gcctgggcaa cagagtgaga ccctgtctct gag 2613

<210> 418

<211> 2033

<212> DNA

<213> Homo sapiens

<400> 418

aagccgcaga ttcccatcca gtatcctaga ggaggagacc cagggtgtg tcctaggagg 60
cccaggaagc ctggtcagcc tggaggccga gggcgggccc gggagatctg ggaaggacat 120
cagtgtctcc acgaagagca gcagggtctc agcccatggc agccgcaggc cccatgactg 180

gggccgcagc ctccagagcc gccacagcag cccattgttc tgggggggtca aaggtggagg 240
ctgtcagagg ggcagtgcag ggggctgctg ggggtgaagcc ccctgtagca gcagcaccca 300
gcctgctgtg gctctgccct cctggacccc ctgtcctcct ggaccccctg ccctcctgga 360
ccctctgccc tcctggaccc ccttccctcc tgggccctcc tggaccccct gccctcctgg 420
atcctctgtc ctcttgacc ccctgccctc ctggaccccc tgtctgtggc ccctgtcctc 480
ctcctccttc cccgacacat gactggaccc cccgatctgc agccgggggtc tgggcactgg 540
gggtcctgtg ggcctctcgg tgtctgggga caatcacagg ttcccgtgcc cacaccacgc 600
ctctgcttcc agaacacact agagggtccc ggcatcctga tgagtccact gtccccgcga 660
tggttttcag ggatggagaa ggctccctgt cctccgctgg aacctgcag ccgggctgac 720
ggtaccccca ccaccaccc agggggcccca gaccctcccc atctccaccg ccaaccacgg 780
ccccggctgc gcacgcgggg ccaggccgtg agctgctgtc cccggatggg gccgccccgg 840
gctggcctgg ctactccgt gtcacagata tccccacaga gaccccagcg agacctgcag 900
aacattacag cagaatgaag gagagccaga ggaagaggca gatgtgctgg cctgtaaaca 960
gtctgatttc caatgtaaac cagattcagg cccacgacat caggtaaaca tctgcatcag 1020
agcccccggc cccccaccgc ccgggaggcc ccgggggtcca cacggccgac tctgggaccc 1080
gtcacagtga ccgccgagac atttcgtaat taggcaaaat tgatccttgc attccttccc 1140
taaatcccaa atctctgcaa ttttacttct tctcaaaaat gaaaacattt ggcaattagc 1200
tgatccaagt gaaaaaggta gagaatgtgc tctcaactgg aaaatgccaa ttaaggaagc 1260
agctctgact tcccaccgc cctggctaag ctgggagctt atcttccccg agaagaatct 1320
gctgggataa gggggcttgg gaaacaccga gggcagggtc gcctcctcag cttcctttga 1380
gagcagatta gccgtggcct tgtgccagca gggcctgggt gccacacagg gtggcagggg 1440
tggcagagcc gggcccggct ctggtactgg gatttggggg ggccgggacc agtggggcac 1500
ccgcttgtgg gcggcactga gggcgggtgac gtaggcagcg ggtgccggtg tctgcccctc 1560
catctggccg ggctccccac cctgctcctg cagccctgga cctcagggcc catttgcggt 1620
gcaaggcggc tcttggccat tttgcccgca gggccctacc ttgggtcttg ggagcttctg 1680
tcccttggcc tctcttgtcc aggtcagcat ctccactgt gggaatccta tgtggcccca 1740
tcgtctggac agtgtgggtc aggtcactgt ggctgttttg tgatgcgtgt gtgggctcat 1800
ccctcagtgc tcagaagctg cagacactat ggaaccgctt ttcaggcccc gtggccgtca 1860
ccccgctct agagacttga ttgcagggac catgcccggc cggcctaact gcaccctca 1920

ctccaggtgg gtggggggac ccaggcctgc tggcccctgt ggtggtgcag cccagaaggt 1980
gtgaatcagt ttacactgtt cagtgcctga ataaaagtca caggacaaag agg 2033

<210> 419

<211> 1766

<212> DNA

<213> Homo sapiens

<400> 419

ggcttgaaat ggaagatgag aggatcctgg acaacctggg ggcagaggga cttcatggct 60
ctgagtggga gtggagaaga tggcattttg gtggatgggt ggaggaagag cataggcaca 120
gatggccacg tggagtgtgg tccacagata agtcacctgg tggagtgcag ccacagtgcc 180
tgagtcagga ggtctcagct cttgtttcag gaacacagtc atccctcaga aatggattgg 240
gtgacaagtg gtctgcatgc tgcacacggg cactgggtga gtgtgcttgg agctgtttgt 300
caggacatca ttagcaatag acagaacacg agggaaagta tcagtgaag aagacgaagt 360
tgttaagttg tttctgactt tatcttttga gcgggctcac agaacatttg agtgggcttt 420
ttagtataag agaaagagcc ctacactttt gcccaattct agttctaggc tccaaaacaa 480
attttactag ggttctgaac tgacgggtta gactgttttt gttactttt attcttataa 540
atatttttgg ccattgcagt ccaatcagaa gaaaagtaga aagcaggtca tttttacctt 600
ctctaagaaa agaaatccaa aatttacaag aaagccatt cttgaaagtc ctttgtgctg 660
ctaggcaggg ctttctgatt attttcagac agatgttgaa cttcagaat ttcctccgtg 720
catcggggtc actgactact tgtgtctaat gcaactctgc actaactaga ttgtgcgccg 780
acctgtatth tcactttcaa acctcatatt ccaacgttgc tcaaggttga ctgtcactga 840
ctgggctttt ctttacgact gtacttatga agaacaatg tacttgtaaa tgtttgggga 900
cttcaaattt agtttacaaa tgtgtagtc tcatgaaga ttcgatttgt attatattta 960
ggcaagtttt ctggctctta atggggctct aatgagtcac cgatggtaag gcttcagatt 1020
cagaccttcc tgtaggatg gggatgagct gtttgcctc atttgccaat tatttgaag 1080
agaaaaccaa tgtaatgcaa tcggaatcca gttgtattat taagaccgc atttgaaacc 1140

tagtttcttc tatcagaagt aatttttctg atttttggat tatgtacttc tccttcatat 1200
 aaatgaatgt tactgctttt gtggtgttac cagacctagc ttatagaaat aaatgacagg 1260
 ccacctgggg gtctgcccgt gcaagcatga actaagcagc aacaagcagt atgccctgcg 1320
 gtgaccagtg tgtcagcatt cacataagcc cgggacagtg aatgcgggcc cttgtcagtc 1380
 acgggcatca ggcgcatggc actgggcaca gctgactgcc tgttgatgct gatggctgga 1440
 tggctgcatt taagtacact ttcacaaaac tcatttgtat ctcttcccga agaaacctaa 1500
 atggaattaa tttgttggag ggctgcaatg taaaattttt aaatagagaa caaaatggag 1560
 tatgttgctg tttcatggaa gagaacatgg gagaaactag caatctgtaa gctaaaaatt 1620
 gatggcagcc cctgccacaa tgaataattg gcaatgccat tcagccttta aaggtatcag 1680
 ataatgaatg agctgggcat aaggcatcta gttcccttcc attattctcc aataggttat 1740
 gtaataaaca tccatccctg aaagat 1766

<210> 420

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 420

tgttttgctc tgctggctct ttaaagatgg atagttgctc aatgtagcag tgatgttctt 60
 ggaattgctg agaaatttgg ggagggcaaa agataggggt agaatttttt cattatttcc 120
 ctttatctaa tacttttaaa tagaaccaac acagcctata tgagttcagg caatatttag 180
 atgtggatc tccatctgtc tcctgtaaaa gataagaatt ttcaagaaca ggattacgtg 240
 gaaaacaaaa agatcttccc ttactctcct ataaatgttt tgttccaaat gtttttatat 300
 atgggctcta gggagtcagg tagttcattg tttcgggtga ctattgatag gacacagaaa 360
 gggagagagg gttaaagaat gtatcgtctc ctgaatattg catcaaaaat gattaggttg 420
 cagaacttca tgaaagcttt actaataatc ttattgttct gacattatgt aaaggtggta 480
 ttaatatgt atgacttgct aaagtgctag ataggtttat aagtaggtag tagggatgtt 540
 gaagattaga gcacttgaac cagaagttct gggaaaacaa ggtgtgtgta atggaacacc 600

actttgagca cagaaacaaa ggtcccttgg acctggtagg gaagatgtga tttatgattg 660
tttctgtgtc cctgtatctg cccaccctgc acagggtctc accaccagg gccaccttct 720
ggtttaaacc caggacactg tcaaaaagtt aagaccccaa aactaattta ctgtaaaaaa 780
cattgaggac tgctgcagag ttttcccttg ttttctttgt gtacttggtc atcattgtat 840
aagttagcca cagcttcaca agagcagctt aaggcttctt tcataaattg gcagtggcat 900
tgagtctca aacattatat cccaaagtct gcaggcagac agctggatac agcgctgtgt 960
ataaatgaga cgtccaaaca cttgagtttc ttaagattgg gatctctttc aaatgaaaaa 1020
ggacagagcc aagtagagaa aagactttgt gctcccaccc agccttaatg agtctcatgg 1080
tctaaaagta taggaagaaa tgaaatgcac tttcagaagc taaaatgaca gtgtctgcta 1140
caaaaggctg tagttgtagg cagtcgggga tgccatgtcc ttggttccat tcctgcgtga 1200
gtctgcagaa ggcacacact ttgtaagagt agagtggact agtgccagcc tgaataggtt 1260
taaaactgca aacagttgga gaacatggaa caggttggtg caggaagcct aagattttgc 1320
aatcatatta taacattggc ttttgacaac ataaatgttg tatcttcctt aaggtcaggt 1380
cggggaaaga aagacttcca gcttcttacc tctgcgtgca tgggcacgtg tgcattgctc 1440
agtccgcagg aggtctcact ccacaggaaa cgctctcctc ccgcataagt ctgtacttcc 1500
atccccatcat ctgtggtagt agtgaaggct aggtgagtaa gcgtgggctg ttctaccac 1560
cagaagtcca ggagctgttg tatacctcat ttctaactcg tgaccgagtg acttgcttta 1620
actttctcga aatcctacag agttgccaaag tctgccctcc ctctcagtc atgttaaact 1680
ctggcctata gcatcatggg acctgtagcc taggggtggga cccctaaag cctctgaatg 1740
tcgctgctta aaagctactg caaactgagg gcaaattgca atcttctatt cttttttgtt 1800
gcaaggggtc ttcacaggtc tcttaacatc tgctttccct gccaccctgc ctttaggggc 1860
tgccagcta tccacacccc taaccacccc tgtgtttctg acagctggcc acacgtcaac 1920
ttctgtactt gccttttctt tgggtgggta gaggccaacc cttctcctc tgaggcctca 1980
gggttctgtt tcttttcagg actttgggta gaagggaaga caccaaaggc tcctttaagc 2040
tgactgctgc atacacattt cacttttttt cctttgacat gacc 2084

<210> 421

<211> 2009

<212> DNA

<213> Homo sapiens

<400> 421

agcttcctgg	ggagaagcac	ggaccgcgca	cctctgagct	gccagggtgg	ggacgctgcc	60
ctagcgggat	ctgaagggat	tttgaaagga	atcatgtctt	cagcctggaa	gactccccgt	120
ggatcagatg	caatgcctga	gatcatggtg	aaaatcattg	gaagtaaaca	ctttcaatac	180
ctcgtggaga	agccaaagat	caaggagaat	gacagcttga	aaacagaaac	ccaacaatg	240
caccagaaac	caatgactga	taatgcaagg	cagatgagca	gagacacccc	agttcccatt	300
aacttcactg	atcagcaaac	cactgataat	ccagatgatg	tgaaagagaa	aaagcaccca	360
gagaacaacc	agaaatcagg	aaacaaccag	aaactactaa	caggggcaaa	cagtagcaga	420
ttcctggatg	gcaatattcc	cagtcaagca	aatgtccact	gcagctctgt	accaaccgga	480
gaccagtcct	tatcctatgt	gcatggcatt	cccaggagaa	agcttagaga	ctggtccttg	540
gaacagatgg	tgagaggcag	ctctgaccaa	cctgaggata	ttggccagag	cccaagtggg	600
acaacaaatg	aagacgcttt	tcttcttgcc	ctggtcagaa	gagaactcaa	gtcacgtcct	660
ttgagttcca	acttattaga	aaagcttcag	aaagagctga	agatcctgga	cccaatctct	720
tcaggatttc	ttctccaatc	tcagctgagc	cgctctttt	tgaagcatga	agtcctctta	780
cagttaccaa	cagttaaaat	cctttgtcag	agattttcta	agaggggttc	tcctgaaatg	840
gtgaattatg	aaaagctact	ctggttttta	aacagtgcag	catcagatta	tccacagcaa	900
aataaagcag	ctgcagacct	gagaaaaact	gagagtcatg	gcactcatag	ccaaagcact	960
ccacctcagc	actccagctc	acagccagaa	gtgaacagga	gtctgttgga	gattttgaag	1020
atggcactaa	ggacaaccaa	tggcagactc	aacatagaca	atctcaatct	gagttttcga	1080
aaagaagatc	gctcgtttct	tggctgcctc	cctctaccta	aggtcagggc	tatatgtggg	1140
aagcatggat	tatatctgac	cctgagcctg	ctggaaacat	tgcttaacca	tcaagatttg	1200
ggttaccaaa	atgaaataaa	atggcagaat	tttgttgaga	tgctgaccag	agcttcttct	1260
gatttgttat	ctgatttgcc	tacaggggaag	aatgaaaaga	aagcccctgc	ccctccaatg	1320
gagcctgaag	tccccgagat	gtctcaaagc	aaaactgaac	atatgaaaac	tccagaagag	1380
gagctgcagc	cagaaagctc	tctgtctgaa	acttcagcct	gcaaagatcc	tctgaaacct	1440
ttaaagatca	ggccagtctc	ccagcccttc	gtgaatccag	ctgtgaagaa	caaggctgag	1500

gaatgtgaga cgtggataga caggttcagg aagctggaaa atgccctcta cctgtgtgat 1560
ctgagtaaca caggagttct ggagaaggaa cgagccagac gcctcattca caactacaat 1620
ctcatittaca acctgtccct gagccctcag aaaatcgacc aggccttgcg cagattccgt 1680
tcgggagaaa atatgctctt ggagccagca ctgcggtact taaaggagct atgataacaa 1740
gccccatattg tgagaacaga tgtttccctt atctcccttt ttaccagac acatgtttct 1800
ccccagccta agtgtattgg cggaggcatt gtcagagtgg aggccgatgc agctattgta 1860
gatgcttttg atttggactt agtttctggc tatgatgctc actcataagc agttcaaagt 1920
gatcagagga aacctagttt tatcttttga tgtggcaaga acccagctac ttagaatctc 1980
cttctgtttt aataaaaactt attattaat 2009

<210> 422

<211> 1748

<212> DNA

<213> Homo sapiens

<400> 422

ttagagacac ttcctgtggc agagaaaaga ggtagtgagc ggtgtttcag gatgtgaggg 60
cccgaggag ccgagtcagg ctctctccac tgcctgcccg ccaccgtgca agctctggcc 120
ggcgctgccc acagtcccca tgggtgggcag ccccgcggc ggggaccct gatcggcagc 180
ggcatgccag ggaagcccaa gcacctgggc gtccccaacg ggcgcatggt tctggctgtg 240
tcagatggag agctgagcag cacgacgggg cccagggcc agggcgaggg ccgcggcagc 300
tctctcagca tccacagcct cccagtggg cccagcagcc ctttcctagc ctctgtcagc 360
agcaaacttg agagccaccg gaagagcctt gggagcacgg agggtgaaag tgaaagccgg 420
ccagggaagt actgctgtgt gtacctgccc gatggcacag cctccttggc cctggccaga 480
cctggcctca ccatccgaga catgctggca gggatctgtg agaaacgagg cctctctcta 540
cctgacatca aggtctacct ggtgggcaat gaacagaagg ccctggtcct ggatcaggac 600
tgcaccgtgc tggcggatca ggaagtgcgg ctggaaaaca ggatcacctt cgagctggag 660
ctgacggcgc tggagcgcgt ggtacgaatc tcagccaagc ccaccaagcg gctgcaggag 720

gcgctgcagc ccattctgga gaagcgcggc ttgagcccg tagaggtggt gctgcaccgg 780
ccaggcgaga aacagcctct ggatctgggg aagctagtga gctcggtggc ggcccagaga 840
ctggtttttg acactcttcc aggtgtgaag atctccaaag cccgtgacaa atctccctgc 900
cgcagccagg gctgcccacc tagaactcag gataaggcca cccatcccc tccagcgtcc 960
cccagttctc tgggtgaagg gccagtagt gccactggaa agcggcagac ctgtgacatc 1020
gaaggcctgg tggagctgct gaaccgggtg cagagcagcg gggccacga ccagaggggc 1080
cttctgagga aagaggacct ggtacttcca gaatttctgc agctgcccgc ccaagggccc 1140
agctccgagg agaccccacc acagacaaa tcagcagccc agcccatcgg gggatccttg 1200
aactccacca ccgactcagc cctctgacag ctaccaaca gtccaggaca gctgcatggc 1260
acccggcggg ccgagcatgc catgggtccg ctctgcatgc cctgtctgtg ccatgagtgt 1320
ccctggcccc ttcctgcat gggcaggccc gcaggaagag ccggtagggg tggaaagggg 1380
actcagatga gacacacccc acagctgcca ccgccttgct cctcaacaag ctcaccccca 1440
atcccttgca gccaggccac aatgggggag gtgagtccag ccccttgga caggcttgcc 1500
caacatggag ggatggcggt ggcagtgcca gcctccccag cctgtgcca gcttcaacag 1560
gggcaagagg aggggccggc ccctcctcag gaagctggta tgagtaaggc cttgagggtg 1620
caggcaggca gccctgtacc ccacccacat agactatact gtacatacag attttgagct 1680
aggcttgggg cagctgggtt tgtccttgat gtatgatact gttattataa taattattat 1740
tattctgc 1748

<210> 423

<211> 2298

<212> DNA

<213> Homo sapiens

<400> 423

atgattgcgg gcagcgggac gcgcgcgcac gctcgggccc ggctctggga cccctggctg 60
atcgacggtc cctgcagtcc ccgcaacctg gtgcccgcag ccccgagcgc gccgcggaca 120
gcggtcaggc tctccaggct cgtccccgcg gggaacagtg tgcgctgcgg agctctcgac 180

gcggcccccgg gacagcgctc ggggccgacg gtggcagcgg gcttccccca gggcggagcgg 240
cgcgcacggg caaccccgcg gcggcttcca ggacaccgcc ggccccgcgg agcaaggggt 300
gcccagaggg gtgggagtcc ggactcggca cacgggagcc ggccggcgga ggcaggggtc 360
agcgcacagt gccgggagat gtaagagggg cgcgcaaggt gcctggagga gttgggttgg 420
gggggtggtc acggtgcccc gggaggcgtg ggatgggcag gggcgcggtg cctggagccg 480
ctgcccagct ccgagcgcg cctcttctt cccgggtggca acaacttct gcttccccga 540
ctcagggcac aggagcttcg gggagaagtt caaggccaca gctttgctct ctcggagccc 600
gatggcgaca ctgctggccc cgggccacac ggttccctcc caggccctcc cgggtggttga 660
gaccggccgg cctctagggt ccggacacgg gttagaatgc caaggaggcc gcggcgctctt 720
tccccggcg ctccacagag gcgcctgagt ggttcccaaa ccgcagaggg gccggcctgg 780
gcctccggct ctcggggacg cacgcggaca cagagtcact attcgagac cccgtcccc 840
tgcccagca tgccctggcc cagagccgca tggagctgat gtcccagac gcctgcgacg 900
gccctttggc ggccagggcc cgagagaaac aaggcctccc ggggcccaac ccaatgtctg 960
tctgtgcctg tctccccca acccccgcg gccggccttg gcattctaac cagtgtccct 1020
tgacgtcaca tctcgccatt tctgccaacc aattgaaact tgcccgttgt cataaaaata 1080
tatatacttt ttatgccatt ggtaaattca aaagtctct gtgtgcctg cttcccagga 1140
aacttcattt cacattggat tagactgcc aggagggcaa cgctgggctg gggcagccgg 1200
gcaactctgc cagggcctcg ctgcccactg agctgccttc cacagctcg tagacccca 1260
tgattgtggc tgtgaattgt gccagccacc ctgataaaca caccactgcc tccaccccat 1320
gacacacgga atttgggggg agggaaggaa gaactcaggg tatgttaaga aaccttccca 1380
attgctttcc tgggagttgg ggcggtgggg actggaatct tactacagca tcttcttttt 1440
agaagctgaa agaactttag ggatagcttt attatttttt tttctatggg aaaactcagt 1500
tttagaaaat ggagtagaaa tgttttccaa ttaatcttt cattggaatc cggaccaact 1560
ttcactttcc atagctgcct ggtggcttca ctatcgagtg gggtgccctc ttttcctgag 1620
gaaggctcctg tgtctcccc tcacccccca gctccaaggg ctgtggggcc cagagctgga 1680
agctcaggag ctctgtgctt cccagaaaa gggcacggct ctctcggcag cctgagacgc 1740
agacatgccg tgtctacctt ctagcaatac agcaggggaa atcaatcctg tctagcacag 1800
tgctttatca ttttctttct tcaactattaa aattttcagc cccaaatagg aagtgtgggg 1860
tgagagcaca cattcccaca ggatgagtct gtgcccagca gtgcccagg tcccacatat 1920

gccctgtag cccctcctaa ccagccaca ctaaggcaga actcaaccgc taactgctct 1980
 ataaactcct cctgtacccc atcgttgctg tatgggtcaa ctactttaaa aaacatacta 2040
 cagatatttt gtggtttagc aagtttaggg actccagaag aacaaaaatg ctttagaaac 2100
 tgagatgaat gcagagatct aaacatcata agcaccaggc cttttaatat ggaatcttgt 2160
 ttttccaaaa taatgaacac agccggtaac gaccaaattg ggattctgaa cataaatata 2220
 tggttactat tctcaataaa actgtttctca agggcaatct ctagaaatga tgcatacctc 2280
 ggagatacac gttcaagc 2298

<210> 424

<211> 1964

<212> DNA

<213> Homo sapiens

<400> 424

ttacagatg tgacctcgaa tccttgggga ttcttggaaa atgggcaagg tgccaaaaga 60
 ggagaactgg ccaggccttc aaaactaaaa caccagagaa ttacagacag cgaacttgcc 120
 cctaagccct cgttgtgggt ttgtgtttga gcatttagga gaggactcca gtgctcctca 180
 gcgacagaca cagctgcctc tgcggtgtct gaaggccctg gtcgtggtga cgctagatgg 240
 ccgccctggg cgcctcctgt gggcgtagag gcatcaccac tctgactgg cagactcagc 300
 atggagttag agcagagtct gacacgagca cttgccatcc caggcgtttc agttctgact 360
 gagaaggtag atgcacaggg gaggagaggg ccctttcgag ctccactctg cctccaccac 420
 tcattcccta accccgcagc ctcagcgccc tcactgttaa aatggggagt ttgcctaca 480
 gggttcagca caatgccagc ctgacatagg aaccccagtg gattgtcagt ttgccatta 540
 tcccctgcat cctggaggtg acaccgcctg gttaataggc aacactcccg acggcccagc 600
 acagccccag ggcagcagga ggctggcctg tggccaagaa tgcattggtg agggggcctg 660
 gagggggact gcagctcctc ctcttcctgc ttctccctg ctccaccccg tgcctagggc 720
 agcacaaaag ccaatcgcta gcaaactccc tgcctagcaa ggcccagcct ggggcagaaa 780
 tggctgcaag tggccgaggt ctctgcaagg ctgtggccgc ctctcccttc ccggcgtgga 840

gacgagataa cacggaagcc aggggaggtc tgaagcctga gtatgatgcg gtggtgatag 900
gagcaggtaa agtggtaaag caggccgggc cagagctgag gggcgggaag acagccctgc 960
tcagagcttg gtggggaggg ggagggggag ccaagcccca ctgctctctc ctctggcata 1020
accagccag aagtttatac gctagcagag gctgcaatgg aaagcccttc catctggcag 1080
gcaggcacct gggattccgg tgctggctct gctgtgtggc ctggggcaaa tgcttgctt 1140
ctctgggctt ggatcttccc atggagaatg acaggaagac taggtgagct caggggtttc 1200
cctatatctc ttgcaaagtg acctagtctt caccacattc tcagcctatg gtttgtaagg 1260
gttggaaaga gccctgggcc aacagacaag tgaaatccag caccgccccc cctcagtgc 1320
ctgagttctg gtcaccacta ctttaccact gaggccaccc ctctgcacaa gaaactgcag 1380
tcatttcata aaggccagtt aggataaaac agaactgagt cccagagttc ctactgcgtg 1440
tctgcagagg gagatggacc ccattgcctt gcagctctgg gacatttggg gatctgcagt 1500
gatctgccac actttgcca cccctgggct cagagtatca cagtctactg ggtgctaggg 1560
gaagaggcag gcccaggacc aggtggtctt tccttagtgc cttcctttca cacttgcaga 1620
gggccccaaa tgcattgattg ccaactgggt ctatacagag ataattgacgg gaccgaaagc 1680
agacggcact caacatgcag ctttgagggc atgccttcat ttcatatgt actagagcag 1740
ttgcgagctg gtagatactc aacactcacc tctccaggga aaaatgtgtg atgtatgtgt 1800
gtgtgtacat gtatatatat gtatatatac acacatatat gtgtatatat atgtatatgt 1860
gttacgtaca tatatataca catatacaca tgcttatttt aaatattgaa ataaaagata 1920
cactgcacac aattttacaa ataaagatac aatactctca attt 1964

<210> 425

<211> 2035

<212> DNA

<213> Homo sapiens

<400> 425

gctccctcgg ccgggcggcg gtgactgtgc accgacgtcg gcgcgggctg caccgccgcg 60
tccgccccgc cgccagcatg gccaccaccg ccacctgcac ccgtttcacc gacgactacc 120

agctcttcga ggagcttggc aagtgtgtga agaaaacctc cacgcaggag tacgcagcaa 180
aaatcatcaa taccaagaaa ttgtctgccc gggatcacca gaaactagaa cgtgaggctc 240
ggatatgtcg acttctgaaa catccaaaca tcgtgcgcct ccatgacagt atttctgaag 300
aagggtttca ctacctcgtg tttagacctg ttaccggcgg ggagctgttt gaagacattg 360
tggccagaga gtactacagt gaagcagatg ccagccactg tatacatcag attctggaga 420
gtgttaacca catccaccag catgacatcg tccacaggga cctgaagcct gagaacctgc 480
tgctggcgag taaatgcaag ggtgccgccg tcaagctggc tgattttggc ctagccatcg 540
aagtacaggg agagcagcag gcttggtttg gttttgctgg caccacaggt tacttgtccc 600
ctgaggtctt gaggaagat ccctatggaa aacctgtgga tatctgggcc tgcggggtca 660
tcctgtatat cctcctgggtg ggctatcctc ctttctggga tgaggatcag cacaagctgt 720
atcagcagat caaggctgga gcctatgatt tcccatcacc agaatgggac acggttaactc 780
ctgaagccaa gaacttgatc aaccagatgc tgaccataaa cccagcaaag cgcatcacgg 840
ctgaccaggc tctcaagcac ccgtgggtct gtcaacgatc cacggtggca tccatgatgc 900
atcgtcagga gactgtggag tgtttgcgca agttcaatgc ccggagaaaa ctgaagggtg 960
ccatcctcac gaccatgctt gtctccagga acttctcagc tgccaaaagc ctattgaaca 1020
agaagtcgga tggcggtgtc aagccacaga gcaacaacaa aaacagtctc gtaagcccag 1080
cccaagagcc cgcgcccttg cagacggcca tggagccaca aaccactgtg gtacacaacg 1140
ctacagatgg gatcaagggc tccacagaga gctgcaacac caccacagaa gatgaggacc 1200
tcaaagctgc cccgctccgc actgggaatg gcagcccggg gcctgaagga cggagctccc 1260
gggacagaac agccccctct gcaggcatgc agccccagcc ttctctctgc tcctcagcca 1320
tgcgaaaaca ggagatcatt aagattacag aacagctgat tgaagccatc aacaatgggg 1380
actttgaggc ctacacgaag atttgtgatc caggcctcac ttcctttgag cctgaggccc 1440
ttggtaacct cgtggagggg atggatttcc ataagtttta ctttgagaat cgtgagtggg 1500
ttcgtgctgc tgatatactc ctgcctgccc ctttaccctt ttgtctctgt ctctgtctca 1560
ccttctcatc ccagttgccc acttttccct tatitgacct tcgtgctgca ctctactct 1620
gtatgcttgt ccccttgtgc ccgatgggt gtagacaggc acctttgaag gccctgctcc 1680
tgagctccaa gtgccattca ttctgcagct gctttgtggc agtgccagtc accacaatca 1740
agctcactta tttcttgccg ggcgcggtgg cttacgcctg taatcccaac actttgggag 1800
gctgaggctg gcggatcacg aggtcaggag atcgaggcca tcctggctaa cacggtgaaa 1860

ccccatctct actaaaaata caaaaaatta gccgggcttg gtggcagtgc ctgtagtccc 1920
agctactcgg gtggctgagg caggagaatg atgtgaacct gggaggcaga gcttgcaagt 1980
agccaagatc aggccactgc actccagcct gggcaacaga gcaagactcc atctc 2035

<210> 426

<211> 2492

<212> DNA

<213> Homo sapiens

<400> 426

caaatgcttc ggggagctgc gatgctgaga taacccggct cctccaggct gcctcatctc 60
agcgattatc ctgaaggagc acccgccctt cagggtgtccc agaagctgct tgtcaggcca 120
ggaagacagc agccctgatg atcagttctt cctaaagcca tccggctcct ggggagaggc 180
aggtgggact ccagaactca cagagctttt gggaggagaa agaggaggcc ggagaagcaa 240
agggctttac agcaagagag tggtcagtcg cagccactgg ggaaaagccc agaggagggg 300
caggggcggg aggagtgggc agaggatgga ggcccagccc gggaagaaag tgggaaaggg 360
tgaccgggtt tttggggtgg ggttgaacgt gatgcttacg tttccagagg aatcttgccc 420
tgtccccacg caggggacag ggaggtgcct agaagcagca gccacaggag ggccgaggtc 480
ttctgcacaa aggcccaggc cacgggcatt ggctggaggg gaatccagcg gctgctggag 540
ctggggtttg cgaggaagtt gggagttgca ggcatggtgg gcctggggtt ggggagggga 600
aggagggcag agcagccaca gaccatgagc tctgtctgcc ttcctcccag accccaggac 660
gccccaggcc tttgtcttcc gtgccttggc gagcctgggg tctccagcct ctcagtcctg 720
ggtggggagg gcttctctct gccccacagc tgcagctcac agaagagtcg cccacctag 780
caagcaggcc tcggagacag ggactggggg agaggctgtg gcaacatgaa accctttaat 840
ccgtggcct ctcctctaata cctctcctga cagcaggag ggggtggcag ggggtgggga 900
gctgcctccc aagattacca caactgcagc tggttccctc agggctatag tgcaccctc 960
tgctttaaag aggcagcccc gttcctgtgg aaccaccttc tggaccagg aagggttgc 1020
tgtgactatg gctagaggac agcagctgag tttgcacagt actctgattg accacaaat 1080

ctcttgttga ccctgaggtg ggggtgtgtc ctcatccctg cttggcagag gctcttgagg 1140
cccggggagt ccagggggca gagctgggac tctggctggt gtttccaggc ctggtgcctt 1200
tgggacaggt cataggtcat aggtgaagtc agtggaccca cgcctccaca tctcagctgc 1260
tcgtgggcgg ggctggggac gcatttgctg tgcaactgat gaagcttcgg gacccctgaa 1320
tccacagact ccccccttcc ccggagaggc cctagcaatg tgttcctgtg gccaaatgtt 1380
tttgtaaaat atgcaaaagt tgagatagtt taaccataac cggttgagac tgtctgtctc 1440
tttccatccc aacttctctt ccgtctgatg gactcttagt tggatgatgt ttgggtggct 1500
gagggcactt gggggatcca gttaagagga aagtgaagctg gggaaacact taatctgggc 1560
ttagtgggat atgctgacat ggttcacagt gacttctttg tacagagaag ttacctccag 1620
ctgagtgtag gcagggcttc caggaacact catcccacag gacatccac cagcagatgc 1680
agcaagagag gctgggccgt gatgtgagcg catgctgtca caccaccct ggccatgtgt 1740
ggtggggagg gcaaagtaac agtcaggagc tcactctcag aaaatctaca aaaagccaca 1800
caggtaacat cgttggtgga ggatttggtt ctaccaagg cctggccagg acagaagttc 1860
tctcctgtta ggaaaatagt ggatattgaa agaataaat tacaccgtac attgctttgt 1920
gttctgatga gagttacaca aattagaatt gatcaaaatt cttgtgttgt gagcccaaac 1980
cagtagtagt accacatggg ttctccgggg gtgaagtcac agattttatg cagtccccgt 2040
atcagattat tttcttagtg taactggtgc actgtgtctt cacaaaatct ggtggttcca 2100
gcaaaatggt aagcaaaatt gccaccaacg cagagaaatg cttgcagaag caagtgttct 2160
gatgacaaaa ctctacaca gattcatcaa taagtcagtg ctgtagtacc agagtaatct 2220
ggtggcacag ttttgtggct gaatacaatg tattttttta aggcatctaa atgattccta 2280
tgaatgcctt aatttcacat aaattttgta catgttttga ggattacaaa tcaaacacat 2340
ttagaaaaaa tactacagag gcacactggg cagtcaatac ataaaaagaa tgtaacttct 2400
ctaggttttg tgaatttggt ggaattcacc agcttcttaa aatttgtaat ttggaatgat 2460
ttttaaaact gaataaatat tcaccttttt tc 2492

<210> 427

<211> 3491

<212> DNA

<213> Homo sapiens

<400> 427

cctcgtgtgc	agtgccttaga	ccttcttgcc	acacatcccg	tccctcacct	cactggatag	60
ccccgaatc	aactgttcac	acgaaagcag	ctgcctgggt	ctgagtggcc	atgctcactc	120
ccaagcgcag	gctgaatgaa	aagaaaactg	tgcaagtagc	ttgtatgggtg	ggaagcccc	180
agcagaggct	gagggtgcag	ccaggtgctc	tggaagcctt	gaggcctctg	gtgtcatctt	240
cctcacctct	aaataagaga	tggtctaggt	tggtcaaggt	cctccctgtc	ctaaaacact	300
ttaatgaaat	ggaagaaagg	ctgcaggctg	atagaggagg	gacagtctgg	tttggttccc	360
tcaagtcttc	aggagagggc	tcaaggacag	tctcccat	cttgttggca	aaatgtaaag	420
tgcagtctgg	accctgtcca	ttgagtagag	actcaggagg	ccaaccaaga	tccctgaaaa	480
gctaacagcg	tggtcagcct	tcccacagac	agtgcaccca	ccgtgggagg	acacttcgcc	540
ccccattgtt	aacgtccacc	gcgcccagac	tcccacagcg	agtccttcc	cttctctccc	600
atgtttgcag	tggagttccc	actcgagaag	acagcacagt	agcaagtaga	ggctggctct	660
gggacactcg	cacccatgtg	tgtcaggaag	cccctgcggt	cacacggccc	atgaggaagc	720
cagaggggct	gctggggctg	atgaggccag	ggcagggcgg	cctgctcttc	cataaatgac	780
agctggcacc	aaagcccaga	gctggcagcc	tccacctgag	gagtggcatc	tccatgaacg	840
gcttgtgttc	tcgcacagcc	ccattgcgta	gatgaggaaa	ctgaagctca	gagaggttcc	900
tgcccttgcc	caaggccaca	cagccggatg	agctagaaag	gtgctagggg	actgggaggt	960
gggggagctg	agacgctgtc	ccgctgctgc	caggatgcgg	ccgccccccg	tgccagccag	1020
gcctgcctcc	tccctctgtc	cggctcagca	gccccggcct	cctgttgctc	ccagtccgag	1080
ctatggccaa	gggagactga	ttcctgctca	ccctgggaga	gagctcagga	ttttgtctca	1140
aaaccttata	aaagatacga	ggctcgacat	tttactaagg	ccgaggactc	ttgatctccc	1200
agacagatcc	tagaaccaca	gggcacatgt	gaccagaatc	caatctgtgc	aaatcaatca	1260
gcaaaaaggag	ccccagcaa	aggcgcaggc	cggggcctcc	ggggaccggc	acctacacag	1320
cgcacagccc	cccagggtcc	gagtcctcca	aaccctgtga	ggcaggagcc	tccttacctt	1380
gatttgcttg	atgtttgcta	atcttctctt	gaacacccca	cagcgtgaag	gtaagcaact	1440
gttccctaaa	cgacttagat	ccttaaaata	tgtgtgggtg	ggccgcatat	ctcatgagag	1500
agcctccgcc	caaaccagag	ccctcctctc	tctgcggcca	acaccctggt	agacctgggg	1560

gagcagcctc tcccgcctcc acccctcag cgtgggtgctg gcccggtggct cctgaaccac 1620
tcaccagtcc agtccggggc ctgggccctt ccccgggggc ctgggtggcag ctcccagtgg 1680
ctcaagcagc gtgcccagca ccgcggtgg aggttgagct ccgtgggtctt ctcttgagcag 1740
gggcccgaagg ccagagacca ggatttggct acggaggcag agcgtccgac tataaatcgg 1800
ctcacaaggg attcaaggga gtcgatgccc agggcacgct ttccaaaatt tttaagctgg 1860
gaggaagaga tagtcgctct ggatcaccca tggctagacg ctgaaaacc acctgggttc 1920
ggaatcctgt cctcagcttc ttaatataac tgccttaaaa ctttaatccc acttgcccct 1980
gttacctaatt tagagcagat gaccctccc ctaatgcctg cggagtgttg cacgtagtag 2040
ggtcaggcca cggcagccta ccggcaattt ccggccaaca gttaaagtag aacatgaaaa 2100
cagaaaacgg ttaaaactgt ccttttctgt gtgaagatca cgttccttc cccgcaatgt 2160
gccccagac gcacgtgggt cttcaggggg ccaggtgcac agacgtccct ccacgttcac 2220
ccctccacc ttggactttc ttttcgccgt ggctgcggca cccttgctgt tttgctggtc 2280
actgccatgg aggcacacag ctgcagagac agagaggacg tgggcggcag agaggactgt 2340
tgacatccaa gtttcctttg ttttttttc ctgtccttct ctcacctct aaagtagact 2400
tcatttttcc taacaggatt agacagtcaa ggagtggctt actacatgtg ggagcttttg 2460
gtatgtgaca tgcgggctgg gcagctgtta gagtccaacg tggggcagca cagagagggg 2520
gccacctccc caggccgtgg ctgcccacac accccaatta gctgaattcg cgtgtggcag 2580
agggaggaaa agggaggaaa cgtgggctgg gcaatggcct cacataggaa acagggtctt 2640
cctggagatt tgggtgatga gatgtcaagc aggtggcctc tggacgtcac cgttgccctg 2700
catggtggcc ccagagcagc ctctatgaac aacctcgctt ccaaaccaca gccacagcc 2760
ggagagtcca ggaagacttg cgcactcaga gcagaagggt aggagtcctc tagacagcct 2820
cgcagccgcg ccagacgccc atagacactg gctgtgaccg ggcgtgctgg cagcggcagt 2880
gcacagtggc cagcactaac cctccctgag aagataaccg gctcattcac ttctcccag 2940
aagacgcgtg gtagcgagta ggcacaggcg tgcacctgct cccgaattac tcaccgagac 3000
acacgggctg agcagacggc cccgtggatg gagacaaaga gctcttctga ccatatcctt 3060
cttaacacc cgtggcatct ctttcgcgc ctccctccct aacctactga cccacctttt 3120
gatttttagc cactgtgat tgataggcct tccaaagagt cccacgtgg catcacctc 3180
cccaggagc gagatgagga gtagtcagcg tgatgcaaaa acgctcttc ttaatccaat 3240
tctaattctg aatgtttcgt gtgggcttaa taccatgtct attaataat agcctcgatg 3300

atgagagagt tacaaagaac aaaactccag acacaaacct ccaaattttt cagcagaagc 3360
actctgcgtc gctgagctga ggctggctct gcgatccata cgtggccgca cccacacagc 3420
acgtgctgtg acgatggctg aacggaaagt gtacactggt cctgaatatt gaaataaaac 3480
aataaacttt t 3491

<210> 428

<211> 3494

<212> DNA

<213> Homo sapiens

<400> 428

ttgaaactct gtaccatta aacaataact cccacttca cctccctcc agcccctggt 60
aactgctatc ctactttcta ctttctgtct ctatggattt gactattcta ggtactagat 120
aagtgagaga ctaattgttc tttttttttt tttttaagtt cattgatcta gctttcaaat 180
tccacattgc aaccaatctt taagaaacaa ccacttggtg gattctgatg tagtaccaa 240
gaaaaatatc cacagttagc tgaaaagttt gttaaaatac tcttcctttt acaactacat 300
atctgtgtaa ggtagattt tcgttatata cttcaaccag cagcacatat cagcacagat 360
tgaatgcaa aatcacatat gagaatcctg ctgtcttcta ttcagtcaga cattaaagat 420
ttgcaaagat gtaaatacgt gccactcttc tcaactaaatt gttttggaaa acagttacct 480
ttttctaaaa tattatttgc gttaacatat aatagatata ttatttgtgt taacatatgt 540
tatttgttaa atgaataaat attttaaaat ttttgccgtt ctaattctaa tacagtaaat 600
attgataggt ataatccact ttgggggtctt gaatacatag taagagtgtg aagaggctct 660
gaaaccaaag actttggagt aggggtataaa agcccagatt ggaagctctg acctggaagg 720
acaacacagt tctagtcttg actgccacga acatgctgaa tggccttaag aaatgactta 780
acttctcaac atcctgtact tcatctgtaa aatttatctg cctagcctat gtcataagat 840
tgttaccaga acaaattag agaacaaaca gttgtaacta agatttaaaa gaaaagttat 900
attgtgagag aaacgttgct tataaaattt ggaattcaat tagttgagcc agtttgagtt 960
ggttatattg cctataatca tgtaggtatt tttttgttgt tattatTTTT gtttgtttgg 1020

ttgggtttgt ttttgttttt gtttttgttt tgacagagtc ttgctctgtc tcccaggctg 1080
gagtgcagtg gcgctgtctc ggctcactgc aggcctccacc tgccgggttc acgccattct 1140
cctgcctcag cctccccagt ggctgggact acaggccccct gccaccacgc ccggctaatt 1200
tttttgtatt tttagtagag acgggggtttc acagtgttcg ccaggatggg cttgatctcc 1260
tgacttcgtg atccgccccgc ctccggcctcc ccaagtgtg gcattacagg tgtgagccac 1320
cgcgccccggc tgggttggttt gttttgtttt tgggacgggg tctcgtctg tctctcagtc 1380
tggagtgcag tgggtgcgtc ttggctcgtc gcaacctccg cctcccagggt tcgggtgatt 1440
ctccctgcct tgagcctcct gagtagctgg gattacaggc acctgccacc accatttgtt 1500
tgttttattg agacagtctc gctctgttgc ccaggctgga gtgcagtggc gcggtctcgg 1560
ctcgtgcag cctccgcctc ccaggttcag ggatcctcat gcatcagcct cccaagtagc 1620
tgggactgca gggggcgtgt cgctgcaccc ggctaatttc tgtatittta gtagagacga 1680
ggtttcacca tgttggccag gctgggtctc aaccctgac ctcgggcggg ccatctgcct 1740
tggcctcccc aagtgtctggg attacaggcg tgagccactg tgcctggcct cagggcacaa 1800
gagactatag tccccggcag atggcagttc gcgagaaggt gtttgacgta atcatccgtt 1860
gcttcaagcg ccacggtgca gaagtcattg atacacctgt atttgaacta aaggaaacac 1920
tgatgggaaa gtatggggaa gactccaagc ttatctatga cctgaaggac cagggcgggg 1980
agctcctgtc cttcgtctat gacctactg ttccttttgc tcggtatttg gcaatgaata 2040
aactgaccaa cattaaacgc taccacatag caaaggata tcggcgggat aaccagcca 2100
tgaccgtgg ccgataccgg gaattctacc agtgtgattt tgacattgct gggaactttg 2160
atcccatgat ccctgatgca gagtgcctga agatcatgtg cgagatcctg agttcacttc 2220
agataggcga cttcctggtc aaggtaaacg atcgacgcat tctagatggg atgtttgcta 2280
tctgtggtgt ttctgacagc aagttccgta ccatctgtc ctcagtagac aagctggaca 2340
aggtgtcctg ggaagaggtg aagaatgaga tgggtgggaga gaaggcctt gcacctgagg 2400
tggctgaccg cattggggac tatgtccagc aacatggtgg ggtatccctg gtggaacagc 2460
tgctccagga tcctaaacta tcccaaaaca agcaggcctt ggagggcctg ggagacctga 2520
agttgctctt tgagtacctg accctatttg gcattgatga caaatctcc tttgacctga 2580
gccttgctcg agggctggat tactacactg ggggtgatcta tgaggcagtg ctgctacaga 2640
ccccagccca ggcaggggaa gagccccctg gtgtgggcag tgtggctgct ggaggacgct 2700
atgatgggct agtgggcatg ttcgacccca aagggcgcaa ggtgccatgt gtggggctca 2760

gcattggggt ggagcggatt ttctccatcg tggaacagag actagaggct ttggaggaga 2820
agatacggac cacggagaca caggtgcttg tggcatctgc acagaagaag ctgctagagg 2880
aaagactaaa gcttgtctca gaactgtggg atgctgggat caaggctgag ctgctgtaca 2940
agaagaaccc aaagctactg aaccagttac agtactgtga ggaggcaggc atcccactgg 3000
tggctatcat cggcgagcag gaactcaagg atgggggtcat caagctccgt tcagtgcga 3060
gcagggaaga ggtggatgtc cgaagagaag accttgtgga ggaaatcaaa aggagaacag 3120
gccagcccct ctgcatctgc tgaactgaac aaactatcag aggaaaggaa gtgggactgg 3180
cactatttga ggttaagaca aactgcatat gtacttcaat tgctttgcac ttttcgttt 3240
cagcggaaga cctgaagagt ggtcagaaca gagccttga tttttattat ggttatttta 3300
ttgattatta ctggcaaaaa cggccaggta caacacctt ttcatacaag gccaggagg 3360
cttagtccag tctgtgctcc tgggctacaa ggaccagcc tgagatggtc ccatctgcag 3420
ggccccgtac cagttggagc agatgcctcc ccaccaccaa ttgccaaagg tccaataaaa 3480
tgcctcaacc acgg 3494

<210> 429

<211> 2646

<212> DNA

<213> Homo sapiens

<400> 429

actctctgcc cttgcagagc tctactggagg aataaacctt tgtagaggaa ggtttgatgg 60
gctttcctgg aagaagtact cataggaaaa cccaaaagct caacagatgc tgtctccttg 120
gttaacatta ggagctatga tctccatctt cccatggcat tagaggttta gatactgagg 180
atcagagagg caagttcagc atcagaaggc aggaagaggc agaaatctgg acaccgattc 240
ctaactctaa agctgcgtca tctctagtgc atctcatcag ctcttcccaa tggcaccaat 300
caactttagc atactggcca gccggaatag atgtccttgg gcattcttaa gatctgagac 360
tgtgatgggt aattttaggg tatcagcttg actgggttga ggaatgcctc agtggctgggt 420
ggcgtccatc attcctgggt gtgtctgtga gagtgtttcc agaggagact cacatgtgag 480

ccagcgggct gagaaggaga cccgtttctca gtgtgagtgt gcactgtcca atcagctcaa 540
ggccaggctg gggacaaaca ggcagaagaa ggaggattct ctctcccacc tttcaggagc 600
aggatgcctt ttctccttgg acatcagact acagggtctt tggcttttgg attctaggac 660
ttgtaccaat ggcctcccgg ggccctcagg ccttcagcct ccaacgaagg tctgtgctgt 720
tggcctccct gattctgagg cttctggact tggactgagg catgctacgg gcttctctga 780
ttctccagct tgtggatggc ctatcatggg acttctccac ctctgtaate acaagggccca 840
atgcccccta atacctttct tttcatatat cctactgggt ctgtctgcct ggggaacctt 900
gactaataca gatatggagc atttgaaatg agaggatttc tgatcctgtt cttcaagaag 960
cagtaggtca gagcatacct ctttaaaata acttctggat agtttcacag ttagaaagaa 1020
tcagcttcag gtgatcttga agatcccact tggattccac tctccagctc tcaggaagct 1080
ctggcttcct tactttctt gggattttcc tttcatgctg gggagagatg ctccctcacc 1140
actaccagc ccatgggaca caccgagtct ggtggaggat gctgtgacct gtggtgcttg 1200
tgattgcgtc ttactgtgtc gccagactg aagtgcagtg gtacagtctc agctcactgc 1260
aacctcggct tcccaggctc aagcaatcct cctgcctcag tatcccaagt agctgggaaa 1320
acaggtaaaa gggaagcaaa ggaagaaaga agaaaagaag acaacccatg taggatgtta 1380
accaggtcac tggttttatt gtcacatgct tttaaaagaa catgcatgag tgagctgtct 1440
cactttccaa tccaagaatg tttgattcca ctgtgatgaa aaattctgtg acctggcagg 1500
aaaacactac aagaagggca gaagcggaaa attctttcta tttccaata tggctttctt 1560
tgattcaaga aaggcctcct ctctccaca tctctgtcct gctcatgacc ccagaagatc 1620
tcaggttgac tgcatttggt ctatgccttc ctcaagcttc acctcttctg tgagcctcct 1680
gggtgggctc cttctggcta aatcttctc ctcaactgtt cttttttatc ttatgcaagc 1740
acctgcctta tctaaaggta catacctttt catagaacac ttgcctgttt acctagctat 1800
ttcccatga ctatgggctt tttgagaggt gctgtgttat ttatttattt atttatttat 1860
cattttgttt tgagacggaa tcttgcctct gttgctcagg ttggagtgca atggcgcgat 1920
cttggctcac tgcaacctcc gcctcccggg ttcaagcgat tctcctgcct cagcctcctg 1980
agtagctggg attacaggca cccaccacca tgcccagcta cttttttttg tatttttagt 2040
agagaaaggg tttcactatg ttggccaggc tggctctgaa ctctgacct caggtgatcc 2100
accaccttg gcctcccaa gtgttgggat cacaggcgtg agccaccttg cctggccact 2160
gtgttatttt tttttacttc tataccttca gcaccccaa cagtgcccaa tacaagttc 2220

cacactaaat atttattgat ggaataatga atagggttgg gggcactggc agggagggtg 2280
cccactgggc tgaaattctg gggcctgaat gcatcactcc cttgcctct ggatgagaaa 2340
aaagagggac agtaccatg agggccctag ggaagccttc tgcagaccaa aagacctctt 2400
tgaacagagg gcagaggaaa caggtctaga gaaagtgaat gtgaagattc aggctttaga 2460
atgagccttg cagacctgct ggcagtgaca agaattacct gtgtacagca ccttgtggtt 2520
cccatgaccc catttagatc tcatcatgac cctgttgggt ggatgttatt ttctgcttta 2580
caggggagag aggccaaact cgtgatatga tctgtctgat atcacttact taaacagtta 2640
agtgggt 2646

<210> 430

<211> 2681

<212> DNA

<213> Homo sapiens

<400> 430

ggtccctgtc tcaggacccc tgagtctcgg ggccccagga gcccagggcc accagccgtg 60
gaggagccct ggccttctgc cttccacacc caatcccact ccgtgctgct gggtccttct 120
ctacgaccca ggctgcagtg gctccacggg cgcaggccac acctgccatg gagacagtgg 180
gcacagggca ggggaggtgg gcgcacacag cctggctgcc actgccatct cctgggcact 240
gggggaaactg cccccaccgc cacacctgtg ctctctgcag ggggaaaagt gccaaactcag 300
acctggcgag ctgagccact ggggtctgag gggcccagat gccaccgtga gcagagccat 360
gggggagatg cacagacacg cgtgtgaagc ctggggggccc tccttaccce ttccctgccc 420
tctgtccccg ccaactccag gccagcccca ggagaggggc tcagtggcgt ctctggcaca 480
gaggagaggg agtgtggcca cctggacccc tgcttctggg acagctgagc ggcctttgag 540
aaatgcagat ccccatcca gactcaaaca caccctgcgg ctgcctctgc tgcccctgga 600
gtttgggagc agcttccctc cccaaaccca ctctgtctct ggtggccaag ggggcaggga 660
cactcatgcg gcatccctgc tgccgcctag ggctggagac tgtccttagt accctgagca 720
gcacccagaa tccaaagtct gtccccggaa agtgcctca gggccatgcg gcgtctgacg 780

tggcacagaa gtggcctgga tggggacaca gaaccaaact gcactcattt cagccaagaa 840
ggctcctctt agcggcataa gtctcccttt ctgttgccag gaaaagtgcc ctcccatcaa 900
gcaaggcttc cgctaagcaa ggctgcactg tgagggtccac acacacccag gcgatggagg 960
ggtgcgggct ccgctcagca ccgcactgaa ctgagcccag cagcgcagta gggactggct 1020
tctccctggg aaaggcttct tgagaggctg aagctgcagg agagggtgat gagttgagaa 1080
gctcaggggtg ggccctcctg ggaggaccgc ctgccctttc taacactgct ggtcctcgga 1140
ggccctcagc cacttggcag ctgcatcccc catacccggg acctccccgc caagttctca 1200
tttctccaat ggcagccttc agagctgaga ggccgagtca agagggtgcc atctcccaag 1260
ttcccatgat tcttggggag cgtctgtgta gctgcccacc tggaccgagg tgggtcccac 1320
actgaggcca attggttggg agtccggggt tgacctgggc aggggacaca tcaaaactgc 1380
tcgaggccaa gcgcggtggc tcacgcctat aatcccagca ctttgggagg ccaaggcagg 1440
tggatcacct gaggtcagaa gtttgagacc agcctggcca acttggggaa cccttgtctc 1500
tacaaaaat acaaaaatgg ttgggcgtgg tggctcacac ctgtaatccc agcaccttgg 1560
gaggccaagg caggtggatc acgaggtcag gagttcaaga ccagcctggt caagatggtg 1620
aaactccgtc tctactaaaa atacaaaaat tagccaggcg tgggtggcgcg tgcctgtaat 1680
cccagcagct actcactcag gaggttgagg caggagaatc tcttgaaccg ggaaggcaga 1740
ggttgacagt agccaagatc gcgccactga actccagcct ggggtgacaga gtgatactgt 1800
ctcagaacag caacaacaaa atgcccgtg ctgctgggtc cagaagagct tgaataactc 1860
catgttcttt ttctcaattt tcatttccca gaactgggca cctccgggct gtgaaaagtt 1920
agggaagtgt ctgacacctc cagaatccat tccaagaag tgcctctggt cccactagca 1980
cctgcgcaga ctcaggccag gcctagaatc tccagttggc cctgcaagtg cctggaggaa 2040
ggatggctct ggccctcggtc ctcccccaac cctgccaag ccagacagac agcacctgca 2100
gacgcagggg gactgcacaa ttccacctgc ccaggacctg accctggcgt gtgcttggcc 2160
ctcctcctcg cccacggcgc ctcagatttc aggaccctcc tcctcgccca cggcgcctca 2220
gacctcagga ccctgccgtc tcacgccttt gtgaacccca aatatctgag accagtctca 2280
gtttatattt ccaaggttaa ggatgcacct gtgacagcct caggaggtcc tgacaacagg 2340
tgcccagggt ggctggggat acagtttgcc ttatacatc ttagggagac acaagatcag 2400
tatgtgtatg gcgtacattg gttcagtcag ccttccactg aatacacgat tgagtctggc 2460
ccagtgaatc cgcattttta tgtaaacagt aagggaacgg ggcaatcata taagcgtttg 2520

tctcagggga gccccagagg gatgacttcc agttccgtct gtcctttgtc cacaaggaat 2580
ttccctgggc gctaattatg agggaggcgt gtagcttctt atcattgtag ctatgttatt 2640
tagaaataaa acgggaggca ggtttgccta attcccaggt t 2681

<210> 431

<211> 2165

<212> DNA

<213> Homo sapiens

<400> 431

acatgctctg tctggccctg tgaatcctca ctcacccatt cagatttctg ttggtgtaaa 60
acgacattcc agctgctgaa gctccgtgat ctgctgtgtt tttccagccc agatccaaga 120
gacctggatg ctttttgcca ttctgatggg aaatgatgag acaggctacc atggatttca 180
gcaccccttc tgtgtttgat cagcaaagag gtgactcatc tgaggaagtt gacctgacca 240
tggtttatca agcagcctct aatggagatg tcaatgctct gactgcagtg attcggaag 300
acctttctat cctagaatgc tgtgacagtg aaggatgcac gcccttgatg catgcggttt 360
ctggacgtca agcggacaca gtgaagctgc tgttgaagat gggagccaat attaacatgc 420
aggatgctta tggccgcaca agtttatgcc tggccaccta cctgggctgg cttgaaggct 480
gtgtgagtct actcagaaac ggtgccaaagc acaatatccc agataaaaat ggccgcctgc 540
cactgcatgc tgccactgct gagcccgata tgaggctcct cacggtcctg ttgcaacagt 600
cgaacatcag cgagattaat caccaggaca atgagggaat gacaccactc cactgggcgg 660
ctttccacaa ccagcctcaa cacacacaaa tgctgctgaa gaagggggca gacccaccc 720
ttgtggataa agactttaaa accgctctcc actgggcagt ccagagtgga aataggattc 780
tgtgctccat cattctgagc catcaccagg ggccgtccat aatcaactat gatgatgaga 840
gtgggaagac atgtgtacat atcgcagcgg cagcgggctt cagcgatatt attcatgagc 900
tggcaagagt ccctgagtgt aacctgcagg ctctggatgt ggatgacagg acacctctgc 960
actgggctgc agctgcaggg aaggccgaat gtgtccagtc actgctggag ttgggaatgg 1020
acagcaacct gcgggacatc aatgagagca cgcccttggc ctatgccctg tactgcggtc 1080

acacggcgtg tgtcaaactc ctctcccaag agagcagaac agagcctact cgaccccctc 1140
 cctcccagag cagtcggccc cagaagaagg agagacgggt caacgtgctc aaccaaatat 1200
 tctgcaaaaa caagaaagaa gagcagagag cccatcagaa ggatcccagc agggaccgat 1260
 acagagagga ggacacctca gaagtcaatg acatcatcac cacctttgat agcatcgtgg 1320
 gtaccaactg ccaagaacag cctggtgatc aggtggctat ggttgaattt aagaagaaaa 1380
 cctcagacaa ttcaaaatat ctcttaccag aaaagaaacc gctggcccgt aaggggcttc 1440
 caccaatcag aacgcagagt ctcccacca tcaccctggg caataacttc ctaacagcct 1500
 cccatagggc cacttcccat gcaggcctga gctctgctcc tcatcatatg gccagcgat 1560
 ctcagaaaag tcgaagtga caggatttat taaataacag aactggctgc cagatgttac 1620
 tagataacc ctggaagagt gattctaate aggtattttc ctacaaagt tggactgtgt 1680
 ctctctctga taagctgctg gacagattgc tcagtgtccg gcctgggtcac caagaggtct 1740
 ccgtgccacc acaccttcgc catctacata atccatcatc aggacaaaat tttcagcatc 1800
 tttcccaaaa cagacacaaa atcagggatc ttctttcac tcggaacaac ctagctcccc 1860
 taccagatca aaaatttcta tctggagaac ctctgcggac aaaccgagtg ctctctgcaa 1920
 ttccaagtca acgaagacac agcacagcag cagaagagag tgaacattct gccaacccca 1980
 ccagtgatga aaattaactg tgggccactc gctgcagaaa tgtagatgaa tatgtatttt 2040
 caactctcaa aggacaagat tactccagtt tgtaagaacg aagaccaatt tagtaagctg 2100
 cattctataa gccatcagtt ttataactcg aaattcttta ttccaataa agatactccc 2160
 taaat 2165

<210> 432

<211> 2217

<212> DNA

<213> Homo sapiens

<400> 432

cactatgaga tatcatctca caccagtttag aatggcaatc attaaaaagt caggaaacaa 60
 caggtgctgg agaggatgcg gagaaatagg aacactttta cactgttggt gggactgtaa 120

actagttcaa ccattgtgga agtcagtgtg gcgattcctc agggatctag aactagaaat 180
accatttgac ccagccatcc cactactggg tatataccca aatgagtata aatcatgctg 240
ctataaagac acatgcacac gtatgtttat tgtggcacta ttcacaatag caaagacatg 300
gaatcaacct agatgccccat cagtgggtgga ctttaataaag aaaatatggt acatatacat 360
catgggatac tatacagcta tttaaaaaaaa acaaaaccga aatcatgtcc tttgcagcaa 420
catggatgca gctggaggtc attatcctaa gtgaattaaa gcaggaacag aaagccaagt 480
accacgtgtt ctcacttaaa agtgggagct aaacattgag tacacatggg cataaacatg 540
gacacgaggg cttacttgag gtgggtgaggg taagaggagg atgagggtca aaaaactgcc 600
tatcttgtag tatggtcagt tgctgggtga cgaaataatc agtacaccaa attccagtga 660
cacagtttat ccgtgtaaca aatgtacata tgtgccccca aacctaaaat caaaaaaaat 720
atgtgtagaa aacaaagagc aaaatgaagg acctaaaacc taaaaacat ttatagtcaa 780
tatataaaaa ggcttaatac cccagtcaaa atcagatatg gataaatttt ataaaaacaa 840
agtaaacaaa gaggggtactg actcttgtag tagttggata ccaagaacca tccctcactg 900
gggcatgctg tggctcacac ctgtttatacc aacactttgg gaaccaagg caggagagga 960
ttgcttgagc ccaggagttt ggcactagcc tgggcaacaa agtgagacc tgtctctaga 1020
aaaattaaaa aaattggcca ggggtggtgg tgtgtgtctg tggctcctagc tactcgggag 1080
gctgagtcgg ggaagattgc tcaagcccgagg gaggtcgagg ctgcagttag ctgtgattgt 1140
gccattacac tccagtctgg gtgacagagc aagagcttat ctcaaaaaag aaaaagactc 1200
catgatttaa tctaatac tcaaaaaacc caactcattc ctccacacgc cctgtgcctt 1260
ggccatagca tttacctcac cattctccta tgcattatct atttttagac ctctgtctcc 1320
ctttgtttaa aatgttctcc cagcctggat aacatagcaa gaccctgtct caacaaaaaa 1380
aataaaaaatt agctgggtat ggtggcatgt gcttgtggc ctagctactt gggaggctga 1440
ggtggaagaa ttacttgagc ccaggatatt tgaggttaca gtgagctatg gttgtgccac 1500
tgtactccag cctgggcaac agagaccag tctggatgag agagaagaga gaggggagag 1560
aggagagaaa aaagaaaaga aaagaaaaag aaaaagaaag aaagaacca tcatctatga 1620
gtgctgtcct cactgaacac cagaggctgg gtattgagtt tacatcagct tttaatgagc 1680
tctcactagg tttcttcacc cattcaatgg gaaggctctgc ttcagagcca taattgtgtt 1740
caacgggact aggttgcaag gttaataaac tcttctcttc tttttaaatt ttaattactt 1800
tattatttca cctttttttt aaagccacat gtaggctgaa ttcatttaat ttgacagaat 1860

aacactcctt actgctaate ctgatcaatt ttagctttgt gtgtctttgg gttggatcca 1920
ctcagataag aggacaaaag agggccgggc atagtacta gtgcctgtaa tcctagcact 1980
ttgggaggcc aaggtgggcg gatcacctga ggtcaggact tcaaaaccag cctggccggc 2040
atggtgaaac ccctgtctct actaaaaata cagggattgg cctggcgtgg tggtagggcg 2100
ctctaatac agcaatttag tgatttgagc tgggctcggg aggctgaggc aggagaatcg 2160
cgtgaaaacc caggaggcgg agcttgacgt gagctgagat cgtgccattg cactcgc 2217

<210> 433

<211> 2013

<212> DNA

<213> Homo sapiens

<400> 433

ttttgttttt tgttttttgt ttttgttttt ttttttgttg tggtagggg ggcaatgctc 60
agctcacaac tcagaggctg cataactctaa atgtcagct cacaacttag agtctgcata 120
ctctaactct gggggagttg tattgagccc caactgtgtt ctgtggctcc ttgtgatttg 180
gagtctgcca ctctgtggga ctaagggtgcc acagctgctg cagagtgtga gtggatatgg 240
ggtttctgcc tgtctttggg ttttacttc agtggcagga gcaaagcagc tgggagggga 300
gtgggggtta cctgctggag actgtgtgct atttactaa aggtggtgtt ggcttggggc 360
aggatactgg ccagtaaagg ttttgatgcc ttctctgtgc ccccaagaa ggaatgattg 420
ttcagagtgt gggaggatac cctgttctcc gcacagtttt accacaaagg ccagggtggg 480
gctttctggc tctctaccg ccaaagcttc atctacaata gcaattgctg ggagtggcag 540
gggcatacta catttccatt ttctgggtggg gcaagcaaag ccaaactcac ctttgcagac 600
atgtgccagc aaagtaatat ggggagttgc catggtcttg ggggaagctg gaggataggg 660
aagaaacatg tgagctggtg cagtcacagg ggctgccttg ccggagctct tcatgggtca 720
ggcatggccc accagtgcag atgctatggg atgggctcct aggttacctg agactgccct 780
gtaagcagtt gtggccagac tggatccctg ggagaggcca gcagaccaag gaggctcag 840
ttggatcagc ttcttctgat ttgcaagacc atcctgcaga aattaggtcc aacagttccc 900

ctagggctaa agtctcttat gggagaaagt tgagcctatg gaaatggccg tcaatggcca 960
 cactctacta caggtgctct tgcactaaac cctctgggta ccacatgagc tgggttgctg 1020
 cccacctct ttgcctgtct tctggttgct gcatctcaga gacgtgtagg ccagcaatca 1080
 ctcagtgcag tccgaccagg atggaggatc tgtgcttttg gccaaattag gggttcactg 1140
 gtaatgagca gtgggtagtt tgtggaaccc atggaggatg gactggccct ctctccttgg 1200
 gtaaaactaca gctcgtttga ggtgtgaata aggcacttag ggtgttggat ttttcattag 1260
 tctgagggta gcaaggacag ttctactgca gaggcaatgg caaaaatatt ttcagttgct 1320
 cttggaggct ctgtctaggg agttgcgaag ttgctactgg ctcaatagct ctggcaatga 1380
 ttggctagtg gcccaggcct ggagaacttg cccagtgaga atatatgaga acaggcactc 1440
 acgtaacagt ctggccactt ttctgaaggg ctgctgcagt atgctgggtg tccactgcag 1500
 tttctagtca cctcagattt tccagtacct gacaacatta tcaccagtga atactgtaaa 1560
 acagcaacaa tggcagcatg cccttttttc taagagctcc atctaaggga ggtatagacc 1620
 ggtttccagc cccaaagcaa ctgtaggagg tagctggaaa cccctgttga aaggtcttac 1680
 ccagtgagga gaacatgact ggggaccac ttaagaaagc agttaggct gggcgcagtg 1740
 gctcatgcct gtaaccctag cactttggga ggccgaggca ggtggattgc ctgagctcag 1800
 gagttcaaga ccagcctggg caacatggtg aaatcccacc tctactaaaa tacaaaaaaa 1860
 gaaaattagc caggtgtggc ggcattgcacc agtagtctca gctaatacggg aggctgaggc 1920
 aggagaattg cttgaacca ggaggcagat gttgctgtga gcggagattg tgccactgca 1980
 ctccagcctg gtgagagagc gagactccgt ctc 2013

<210> 434

<211> 2821

<212> DNA

<213> Homo sapiens

<400> 434

agtttccagc cgccgctctc ctcagtgcc ggtggcccag gagggcctgg gagcccgaag 60
 ccgtccccga gtcgctccta ggtcactggc gcgatgcggg ccgtcctctc ggctgatggg 120

ttggaagccc agcgaggcta gaggccagtc ccaaagtc caggcatcag ggctgcagcc 180
caggagcctc aaggcggccc ggcgggacgac tggacggccg gacaggtgag ctcttgatcg 240
tccgcggcct gatagtttgc acttggctct cccactttgg ggctccgtgg aagccacgtc 300
agagaggctg tgtttgtgtc tgagcatgca tgcgagtgga ggggagtggg gagtaatccc 360
gcgtctcctc tctgagttcg gaacccatgg aggaagaaaag cagaggtgcc agacaggcct 420
ctgataggca cctgcaggat tggggcagag cggccgcagc gcaggagcgc cggcaagcct 480
ggcccttccc gggaggcccc ctttgtccgg ttccaccctg gcctgttgcc tcacatgcaa 540
caagtgtctg aatgtggcgc tctcctggcc gagggcagcc ctgggcggtg agtgggatga 600
caccacagcc tgcagggtgc ctgtaggtct ccaccagat gggcaggatt ggaggtggcc 660
gcagcgctcg tgggctttcc ctcagcaggt gtctccatgc tggcctcccc gcctcagggc 720
ttcatccac tccgtgggccc tgatctccct ggggcacctg ggatgtccat ctgcgttagc 780
tggagctact ccatggcctg tggcgtgcca cacacagcgg catttcggtg tcattaggca 840
cagctggagg tgcaaggagg agggcagcct catgtccagt tccatgtaac ttgcttcttc 900
tgaataaagg caatttgcta actttctcgc taaataggat ttggtttcta tggcttttaa 960
agcttctccg ataaaatact tgcaacaagg gaactctctc ctctacact ctctgactg 1020
atggttcgga agtcctcctg ccctctgaga gcttgcagtt tcttgtgaaa aagagaaact 1080
aagcagcaat agaacagacc cgggtgtctgc ttgcgtgggt aagacggtaa atgctaaatg 1140
tgtgacactg ccttttagaaa ccattttctc cagcctggct tgctggctgc ccgtctgggt 1200
tgctgtgttg tgtctccagt ggcttttagct tccaacagga aagcctggta gccgagcgaa 1260
tctgtgacct aggaagtagc aattaaatgc ctgggacgct gcctcgaggc tgggtgtgtgc 1320
tctgaggtaa gttccgattt gccaaagcac atctgtcgat ctgtcgcccg agtcttcaca 1380
ccctgactgc ctccatcatt ttaaaccatcg ggagcagttg cctgcagcgg ggttcagatg 1440
ccagccaggg gcacagcctg tgaactgtgg gtagatggca aagtctagca tttctggcaa 1500
aggaaaaaac atttggtaac tctctgagta aatttctgac tgagatgaag ataccattg 1560
tggggcagca tcctgaagcg gaagcctggg ctgtatgttt ccaagaggag gagcaggagt 1620
ggccacagcc atgtacgcca cgatgtacac caggggctgc gtggccacag ctctgggtctg 1680
ctgggtctgt ccctggagcc cctccaccag tgctgggctg tggctgtggc tgtctctggt 1740
ttgtctttct gggaaacctt ggccagggtg gtgtgagggc agggctagcc ttggacatct 1800
gcacttccca tagcagcctc tgggccagag ctcaccgct gtgggcaggt gatcagggtg 1860

atcagggtccc acgggtcccc tcctctgcac ctggagcctt ctgggtgtag aacagaaaaa 1920
 taggaggggg caaccagag gcctcctgct ctccaggaag gaatggatgc tggacaggtc 1980
 cagggtggag gcagaggag tgagggggccc ttgggggaac atctgtccta gagggcttga 2040
 tttccaggct gccacccca ctctacccc taatctggtg ttcctcacct gcctccagga 2100
 agtcctcacc tgaggtctgc agcgggtgtg ccaagcgcca gcccacatc acctgctccc 2160
 aggcctgccc aggggatggg tcctgtggcc agtaccctcg gggtcagctt gaccagacc 2220
 cagcccagaa cctgtcccat ggccccagga ggacaggatg gtcagggaag cccaagggat 2280
 gagccctttt gtccacaagc ttccctctga catgggcagg ctgcttgtgc gacccacag 2340
 cccccacctc tcatgaacaa tgggaatggg gcaggcccct cgatgctggg ctggatcctc 2400
 ccgcccctaa gcagggtgcac tctgtcccct ttgagaagag accaagggat acaagtgtg 2460
 ggtcctggcg ggggtgcccct cctccctgcc tgtgggggtc tcattactgc ctctgcccc 2520
 caccacaaac accccctaga gaggccttcg gaggcaggta ctgagccctg gggccagggt 2580
 gccaggagcc caatggcagg tcttgggtga ctgctggccc tggggcaatg gtgagaaagc 2640
 caggcaggca gctgcaggaa ggagctgagg agaaaggcgg cagagcctca aaagctgtg 2700
 gcggccgggc acagtggctc acacctggaa tcccagcact ttgggaggcc gaggcgggcg 2760
 gatcacgagg tcaggagatc gagaccatcc tggctaacac ggtgaaacct ccgtctctac 2820
 t 2821

<210> 435

<211> 2891

<212> DNA

<213> Homo sapiens

<400> 435

ctctttgggg ggtaagacag gaaggggaga tgggccccaa gttgttacct taaaagggt 60
 gatggaagca aagagaagag gaagtgggtg tcggggtgag agctgggccc gcgccccaca 120
 tggctgtcat acaggaagcc ctgctgaagc agctgtcccc ggaagaagcc atttccaaac 180
 ctctgtcctt gcctggggcc agttgggaca ggctccctgg cccctctcct tttgggagga 240

cccacccctg cagccccacc actcacactc gctctctggg gagctgcctc cccccccca 300
gccccatac acctgtcctg gctccagggc cagttgtgcc catggaagcc tctactgggg 360
aagctggggt gggggtgcc aacctaaagg cagagacaga ctgagacaga gaccggcggg 420
aactctgcc gggctcttga cggcccccaa cctctgccat gcgtggccag ccctcctggg 480
gtttgcccag gccattttgg gactggaaca agagaagaac aaccgcccc cgtccccacc 540
ccaggccctg gtccagctcc cagggacacc acagctttcc tctctgggcc tctctgaagg 600
aggtgtgggg aggttggatt gggtttggga ggcaaaagca cctccaaggc cctgctgtgc 660
ctttagactg gacgtgtgga caagaatgcg cccacggctc gtggccacac agccccctgtg 720
ctagacatcg cctgggtgcc gcacaaatgac aacgtcattg ccagtggctc cgaggactgc 780
acagtcattg tgtgggagat cccagatggg ggcctgatgc tgcccctgcg ggagcccgtc 840
gtcacccctg agggccacac caagcgtgtg ggcattgtgg cctggcacac cacagcccag 900
aacgtgctgc tcagtgcagg tgctgcggga ggaggggctt gggggtggct cgtggcctgc 960
agtggatgag ggcaggaggc tcatggcttc tgacactgtg gggaacgtgc aggttgtgac 1020
aacgtgatca tgggtgtggga cgtgggcact ggggcgcca tgctgacact gggcccagag 1080
gtgcaccag acacgatcta cagtgtggac tggagccgag atggaggcct catttgtacc 1140
tcctgccgtg acaagcgcgt gcgcatac gagccccgca aaggcactgt cgtagctgag 1200
aaggaccgtc cccacgaggg gaccggccc gtgcgtgcag tgttcgtgtc ggaggggaag 1260
atcctgacca cgggcttcag ccgcatgagt gagcggcagg tggcgtgtg ggacacagt 1320
agtgtgggg caggaagccg agggccccca ggctgggaac caagactgga ggtttcgtcc 1380
ctgctctgcc actcacctg caggatggcc atgggcctca gtttaccag gcgtgagatg 1440
gttgttccca ctggttggc gggaggggcc tcacaggtca ctgcccagg aagaccacca 1500
tcccagggcc tgggatgta cctctcacct gtgtctacag aagcacctg aggagccgt 1560
gtccctgcag gagctggaca ccagcagcgg tgcctgctg cccttctttg accctgacac 1620
caacatcgtc tacctccgtg gcaaggtggc ctcgtcgggc ggggtggggg tgggaggtgg 1680
gcaggatggg cctggagagg gccagggcag tgggcatccg ctggtattga ccctccctcc 1740
acacctgcc cctacagggt gacagctcaa tccggtactt tgagatcact tccaggccc 1800
ctttcctgca ctatctctcc atgttcagtt ccaaggagtc ccagcggggc atgggctaca 1860
tgcccaaacg tggcctggag gtgaacaagt gtgagatcgc caggtgactg accccggcc 1920
ctgaccgcag catgctcctt gggcagtggg cagtcccaag cccaccaac cagactgtgg 1980

gccccgctca ccttccccctt cccacaggtt ctacaagctg cacgagcgga ggtgtgagcc 2040
cattgccatg acagtgcctc gaaaggtgat gctccccgcg cccaccctgg gctccaggct 2100
gggcactgac tttgcggtct tgtgggggggt gtcctggcat aagcgctttc ctcactatcc 2160
ctggccttgc ccacagtcgg acctgttcca ggaggacctg taccaccca cgcagggcc 2220
cgaccctgcc ctcacggctg aggagtggct ggggggctcg gatgctgggc ccctcctcat 2280
ctccctcaag gatggctacg tcccccaaa gagccgggag ctgagggtca accggggcct 2340
ggacaccggg cgcaggaggg cagcaccaga ggccagtggc actcccagct cggtgagagg 2400
gctgggaagc caggggaataa aactgggagg gtgggggtgg gctggtgttt ggggcacctc 2460
aaactcaca cattgggaat ctttgtgggt ccgggaatgg taatcctgag gcctcagaac 2520
acaggtttca gattgatagg cctgcaggct tccaggcagc aaccagctga gcgactaaag 2580
ggcccaaggc cagggtctta gggatggggc tcagcagagg ctggggtaag gggagccagg 2640
gaggagctgg gcctaata gacccgggtc cccaggatgc cgtgtctcgg ctggaggagg 2700
agatgcggaa gctccaggcc acggtgcagg agctccagaa gcgcttgac aggctggagg 2760
agacagtcca ggccaagtag agccccgcag ggcctccagc agggtcagcc attcacacc 2820
atccactcac ctccattcc cagccacatg gcagagaaaa aaatcataat aaaatggctt 2880
tattttctgg t 2891

<210> 436

<211> 2398

<212> DNA

<213> Homo sapiens

<400> 436

gtgcccgtct tccctgagac ggttttgggg tggaacagga gtggctcctc aggggggaaat 60
gaaaggaact gaggagctcc agtcgtgaga aggccaatga agcaggcacc gccagttggg 120
aaatggacct ccttgatgc tgcattgttt tctctggccc agctcctgct tggggcctga 180
tgtacaccct ggatggtggc tacaggtggg gcaccctgtg ctgctctgca tctccatcca 240
gtcccccatc tccacccaaa acagctcagt tcccagaga agctccctgg aaaccgggag 300

gctgacttct tcaccaactg cagaaccacc tgaggccacc tggcagaatg cgatccagga 360
ctgcacgtgg cattccgctg ccgtgtctca gtgggatcct tccatccaga acggctcctc 420
cgtctttctc ctctctcat aattttgaca gttttaaagc atccaggcta tttttgtctt 480
tcataacctt gacactcttg aagagtactg gccaatatt ttgtagaatg tcctccaact 540
tgagtttgtc tagtgctttc tcacaatgag aatgaggttt tgtgtttttg gtgagaacac 600
cacagaagca gggtataccc ttcccatgc attatatcag gaggcacatg tgatattgct 660
gcatcccatt actggagacg ttaactttga gagatgatgt agcaaagatt tctccattgt 720
aaaatcctat ttttcttct gaacttaatg agtatcttac aaggagctgt cttggagact 780
atgtaaatat cttgtttatc atcatacttt caccaaccaa ttttggcatt cattggtgat 840
tcttgtctgc aatattaatt accactgtgt ttccaacag atgatttttc tactttcata 900
attccttctc catttattaa ttgtaattca gtggtaagga agagctgtcc cttctctccc 960
aattacttat gcaattattt cagtatagac tcatggatat ttagtttatt ctaccagtga 1020
taatccatga ccaacatcat ttgtatcatt gttccaactg tcccaggtat ggccaatgta 1080
agcatcttca agtcaccct tgtgtttgtt tgaaatgcc ttattctatt ttgagcactt 1140
cctttctgac ataagatgtt ccaggattat tttataattt cactgacccc accctgtact 1200
taatcatttc tccaaagaac tctgcttctt ttattgaggg aatgtattta gaatctaaga 1260
tctgggtgct ggatgtcctc attgttactg aggtgtcact gtgtctaggg cctctcagca 1320
gacagagcta gggaatatgg gttaccaact ctgaaactat tttatgggta ttctgagatt 1380
gagcaaataa gtaaatacat tgtatttagt gggaggagg catctcactg tcaaagagag 1440
aactacaaat aaaaagggaa gggcaaagtg aaccctattg tgtagatta gaatcagagg 1500
catcagcatg agctcctgat ttttagtgta tgtacagatt gacagatata gaaataaata 1560
tgacctggca attccattcc taggcatata cctagcagaa atccatggtc ataaaaaaaa 1620
acatggacaa gaatgatcat gctgggagtg gtggctcacg cctgtaatcc caacactttg 1680
ggaggctgag gcaagcagat tgcttgagtc caggagtttg agaccagcct gggcaacatg 1740
gcgaaaccct gtctccacta aaaatacaaa aattagctgg gtgtggtggt gcatgcctgt 1800
agttccagct acttgagagg ctgaggtagg aggatggctt gagcctggga gtcagagact 1860
gaagggagcc aagattgtac cactgcactc caacctgggg aacagagtga gacctgaag 1920
aaagaaagag agaaagagag aaagagaaaa gaaagaagaa agaaaggaag aaagaaagaa 1980
agaaagaaag agaaagaaag aaaaaaagag agaaagagga aaaaaaaaaa agaatgatca 2040

taggatcata gctgcactat tatcatagtc ctaagctgta aaccacgcaa attcccgttg 2100
acaccagact aaagaatgaa tgaccgacca ctacatgcaa cattatggat gaaaatacaa 2160
ttgcggaaaag acattttctc aaaaaatgct gtgtgatacc atttatataa agcacaaaacc 2220
aggcaaatta atccatgtca caagaactca gtatcaattt tctgcaagag aaacgagggg 2280
gtttctgagc tgctggtagt gttctgtcat ttggctctggg tgctggttgc attggtgtgt 2340
ctaattctta aaatgtatat acattattca tcagtaaaaa gttttttaaa atattcat 2398

<210> 437

<211> 4084

<212> DNA

<213> Homo sapiens

<400> 437

acacacacac acaaacacac acacacacac acacacacac acacacacac acactcatgg 60
taaccagttc aggatggaca aagaaacagt cacagtcttt ttgggaaca cactcccctg 120
tgacacttag atcctaatgc tgactccaat tccctcctgg gacctcccct ctccttgccg 180
catgctgggc tttcccttag aaaaccccat gtcatttcct tcaatggaac atgaatcagc 240
ttcaccacac gtgtctgcat gtctctgtcc atagcaaacg tttttattac cttaaaatat 300
agatctttac cttaactagc caagacctag gacccttttt ccaagctctt ttagatgaag 360
taataaatgc aaatattaga gatgtgtata tgtgtataaa tatatggaga aaagatgttg 420
cctagttgta caaattagct ttaatacaac tcctgattta aattatttaa ttgtgagaag 480
ggcgattcta actcaacaca ccaacgaaat aaaagcctta tccctctgct ccgccaaaat 540
atcccattta gagcctgcgt gtgtgtgtac acacacgtgt gcactcatcc ccacctgacc 600
gtatcaaatt attatttaaa ctagatatatt ttactttgtt gcatagtagt aatggtttct 660
ggaatgaaaa aataaaaaac aggagaataa aactgtttta atgtatctcc gggatgaacgc 720
tgtggccact gcacggaccc cgctgatggc gccagtgacc tgcgtctcag gaagaggttc 780
tggcggggcc tccgcctgag gccgcgcccc tgggacctgt cccgcgtcca cgtgaatgcg 840
gagcgcagca ttcaccatcc cctccctgaa acagcgggtcc ccgaggtgct ccacaggcag 900

ggccgagctg ggcaaggggg agcccagccc ctgcacgggc cgccctgagc agcggggacg 960
caggaagagc tcgctggctc caccagcccc taccacagat gcgggacctc agaccagcaa 1020
ggacctggag cccccacccc acggttgcca ggaggcggac aggggaggct cctggggggc 1080
taccacctcg aggccgttcc gccagaactt gagcgacttg ggaaggcaca gtgtcctgcc 1140
cttgaagagg aacctgtgtc ctggaggcag cagcctggga gtcctcctc tgaggacacc 1200
gcagaggcga gtgactctgg cggcgcagcg ctggctttcc cgtccgcaga ggagagctgt 1260
ggggctgggt gagctggacc agggagcaca gctggctgct ctcggcctcc gatggggagt 1320
ggacagctta gggggttgcc cccgtgccag ccagcctgct ggccactctg ggcttcatca 1380
caccctcacc tgcctgcgca ggcacctagc actgcaggct ggagcttctg gccatgctgg 1440
tcaacttccc caacgagcct ctgctgcctg ggaacagcaa ggccagagct acaccgccct 1500
gcacttggca gccatgtacc ttggagatgg tgaagctgct agtgggaaca taggacgccg 1560
atgttgacat cagggactac actgggaaaa gggcctccca gcatgtgagt cagagcatca 1620
cagaagagat tgagaccctg atgggagtc tggacaagga cgatggggag agcaccgcca 1680
gcagcggggg tgagtactgg aagatttaaa agctgcccc tccatctcac cacctacaaa 1740
ctctcacacg tcctggaaga tggggggacc ctctccacca tcaccacttg gctgaagggtg 1800
gtccagacgt gaagccaagg attccaaggc gcacagcctc gggcaggact aatggactta 1860
aaaaacacag gctcaacaaa atccacttca caaccagat ggttcatatc acaccctctt 1920
tcaaggaccc agagcagcca ctggaagaga aggagtagga acgctctctt aaagtccact 1980
tctctatctc cttcaaatta agaccaaagt ccaatgtatt taggtaaaaa ataatttctt 2040
ttagaaaatg ctaaggtttg tcttctgaaa ttttaataca gaaacaaaaa aagaacacta 2100
gatgtaatga agtgagacca gaaaagacaa actaaactat cttactagg ttggaatgga 2160
tggggtggag ttcctatcag gctagcattc tggggaaagc tgtatttttt tttttttggc 2220
ggtgggggga aggtgtctca ctctgtcgcc caggctggaa tgcagtggcg ccatctccgc 2280
tactgcaag ctacagccct cgggtttatg ccattctcca gcccagcct ccagtagct 2340
gggactacag gcgtccgcca ccacacacgg ctaatttttt tgtattttta gttgagacgg 2400
tgtttcaccg tgttctccag gatggtctcg attcctgaat tcgtgatccg cccgcctctg 2460
cctcccaaag tgctgggatt acaggcgtga gccactgcgc ctggccggat ttctttttaa 2520
gagattcatc ataccttgac ctgtgcccc tttccctcct ccacctgtct gacctggcat 2580
tcctatttct ggagaccaga agtgggggga agagaaggga tgactgtttc tttgctttca 2640

ccattcctgc atgcatgca aaggaaggaa tattgcgctt ttaaatatcc gttttattaa 2700
gtaagtgggt actctttcaa agacaaaaaa aatgcaaatt gttacaaaac tggcagtatt 2760
tgtaagtgca agcactacac gctgccttgt tcttttacca attgcatttg cattttaagg 2820
tactacttgt acagccatgg tggagaacag tttggagggt cctctaaaca ctgaaaatag 2880
aggtgccaca tgatccagca atcccactgt tggatatata cccagaaat aagaaatgag 2940
tatatcgaag aaattatctg cactcccatg ttggttgcac cactgttgac aatagctaag 3000
atttgggaagc aacctaagtg tccatcaaca gattaatgta ttaaagaaaa tgtggtagat 3060
acacacagtg gagtattatt cagccctaaa aaagaatgag attcagtcac ttgcaacaac 3120
atggaaggaa ctggatatca ttatgttaag ggaaataagc caagcacgga aaggcagaca 3180
ttgcatgttc tcacttattt gtgggatcta aaaatcaaaa caattgaact catggacata 3240
gtaagtacta gggggctggg gggggagaca gggcacgggt aatgggtaca aaaataggca 3300
gaaggaatga ataagacata ctatttgata gcacaacagg gggactctag tcaataattg 3360
tacatttaaa aataactaaa agaatctaatt tggattgtaa cacaaaggaa acatgcttaa 3420
agggatggat acccactctc catgatgtga ttagttcatg ctgcatgcct gtatcaaaac 3480
atctcatgca ccccataaat atatatgctt attatatact cacaaaaatg cttgaaaata 3540
aaaataaagg aactactgaa ggtcagggtca gagtggaaat gtaaaaatac taattagaga 3600
ataatgtgaa tacaacagga atcctgttgg tattctattt atattgtaag cagcagttca 3660
attgttttga aaaagtaatt tcaattttta tcactgaact aaagaaatgg gcaaggctga 3720
cttccgtaat ataggttcta cctaaccatc tctaaccaccg ctgtcaagga ggaccagtgt 3780
taagggtacat tactaacaac cacacaaatt tttaaaagaa aagaacactc ttagcagcct 3840
atgggtacttt gaaatgaaat attgcctctc attctcactt gtgttgccat tccaaaagta 3900
tgaatttgct gaggtttata ttctgggtat tatataacca ttggttctgt ttggcataac 3960
cctattaaat ggtgcgcaga gctgaattac ctacagaaac tttctggttt aattagcata 4020
aattgggtata aatattagtg agcccatact tctgtgatat aattaaacca acttaatgat 4080
tctc 4084

<210> 438

<211> 2591

<212> DNA

<213> Homo sapiens

<400> 438

```
gtgcaaagag ctctttttgt aagacttact cagagatacc aagaagatga agaacaaacc 60
agcacccaac ctcatagggc accaagcaag gaagaagatg atacagttaa ctggtattcc 120
agtagtgaag aggaagaagg aagcagtgtc aaatcaatac tgaaaacatt acagaaacaa 180
acagaaactt taaggaatca gcaacaacct tccacagaac tcagcactcc tgctgatcca 240
agacttgcta aagagaaaag taaaggaaac caagtgggtg accctaggct taggactatc 300
ccaaggcaag acattagaaa gccttctgag tctgccccac tggatcttag acttgcgtag 360
gatcccagga aattgagagg gaatggaagt ggtcacatag gctcttctgt tgggtggagca 420
aagtttgatt tgcattcatg aaatgctggc actaatgtca aacacaaaag aggcgatgat 480
gatgatgaag atacagaaag agaactgaga gaaaaagctt tcttaatacc tttggatgcc 540
tcacctggca taatgctcca ggatccaagg tcacaattga gacagttcag tcacattaaa 600
atggacatta ctctaaccaa acccaacttt gcaaaacaca tcgtgtgggc tcccgaagac 660
ttacttccag tacctttacc taaacctgat ccagtgtctt caatcaattt acctctgccc 720
ccacttatag ctgaccagag gctaaataga ttatggaata caaaaagtga tcttcatcaa 780
aacacagtgt ccattgatcc aaaattagca gccaaagcca aaattaacac aacaaacaga 840
gaaggctacc tagaacaatt tggagactca cacgggttcag gagctaaatt aggagatcct 900
agactacaaa aaaattttga tcctaggctt cacagactgc ccaatacaga gtctcatcaa 960
gtggttatga aggattcaca tgcattcaag ggtgcccctc acttaccag atcaaaccct 1020
ggttcattcac agccctcagg ggcaggaact agcaattctg gttccggggc tctgcctcca 1080
tatgccccta aactctcttc ctgagctggc ctccactgg gaacttcac ttcagttctt 1140
agtggattaa gtttgatatga ccctagggat cacgggttcac catccacatc agagctagca 1200
acagcttctt caggagaaaa ctcaaagaac cagaaaaaaa gtggtggctt aaaaagtagt 1260
gacaaaactg aaccttctcc tggagaagcc atccttcac aaaaaccag tccaaacgtg 1320
ggagtcactc ttgaggggcc agctgaccca caggcggacg ttcccaggag ttctggttag 1380
gttcaggtcc cagcagtgca cagccttctt gttcaggcat taacaggctt aattaggcca 1440
cagtacagtg atccaaggca ggcaaggcag ccaggacagg ggagcccgac cccagataat 1500
```


gatcccggtg gagaaacaga tgacaaatct ctgaaagagg tttttaaaac ttttgatcca 1560
 accgcttcac ctttttgta gctatttgtt aactgagcaa ttcttttcac tcttgatgact 1620
 atctcagtcc tctgctgttt tgtaactggg ttacctctat agtttattta tttttaaaatt 1680
 ataaacactt ttcagctgct agtatcagaa ccacatgaag ttatagcctc taaagcctgt 1740
 ggtattttat ataatatatt tataacttta agagactgta gtaattgacc taaaaactta 1800
 tgtagcttc agtaaaagta cttttattgt aaataaaca tcatgaactc aacactctgc 1860
 ctgaatatat gccagttgtc tttcataatc aatgtttaga taaatgattg ccacttttta 1920
 tatgggtgtt tagtttcaag caatatgatg tacattactt ttgagaaaca gtattttgac 1980
 taggacctct cttatttgct agcacagaa tgattaatat gtaatgctac ctgctaatta 2040
 aaatgtaaaa tcaagtaaag aaaacatttt aaaattacaa ttagcagagc agttcatgtt 2100
 taagggcatc acttttatta gtattggcaa tattatttgt gtaaataagc catttgaatg 2160
 tcatatcttt ttaaagtatt ttattgtata ctgtatcata gaagttggag gtatataaat 2220
 agaacatttt gctaaagtga aaaatttcca agttctctag cataactttt tacatttaat 2280
 ttttcatatg aaatagcaat tagttactgc tgtgttacat tgtgatgttt atgtatgtca 2340
 atgtttttgt ctttaacagc ataatttata ttgctttttc aaatgatgta gctgcattaa 2400
 ttgtgttcat catgactttg gcgattttta acaaaatttt taaagacca gtgagagtct 2460
 gtagtgatta ttacacggat aatgttttaa atgtctaggt cctgtatttt tttcttaaat 2520
 agcaagaaaa tacagattgc tagtatagtc aacagtattt ggctatcaat aaagaatctc 2580
 ttttaagatct c 2591

<210> 439

<211> 2496

<212> DNA

<213> Homo sapiens

<400> 439

aagaaacctt ggaggaagaa cggcattaaa gatcaaaagc atgatgactc ctgatgaaaa 60
 catcaccaaa tgatgaaccc acgagcaaaa agggatttct acttggcggc acctgacttg 120

ctggatccta aatctgccgc tcagaactcc aaaccgaggc tctcgttttc cacgaaaccc 180
acagtgccttg cttcccgggt ggagagtgc acgaccatta atgttatgaa atggaagacg 240
gtctccacga tattcctggg ggttgctctc tatctgatca tcggagccac cgtgttcaaa 300
gcattggagc agcctcatga gatttcacag aggaccacca ttgtgatcca gaagcaaaca 360
ttcatatccc aacattcctg tgtcaattcg acggagctgg atgaactcat tcaggatttg 420
gaaacatctc accacgcaca gaaggcggca aaatattctg tatcatctat gccttactgg 480
gaattccccct ctttggtttt ctcttggctg gagttggaga tcagctaggc accatatttg 540
gaaaaggaat tgccaaagtg gaagatacgt ttattaagtg gaatgttagt cagaccaaga 600
ttcgcatcat ctcaacaatc atatttatac tatttggctg tgtactcttt gtggctctgc 660
ctgcgatcat attcaaacac atagaaggct ggagtgcctt ggacgccatt tattttgtgg 720
ttatcactct aacaactatt ggatttgggtg actacgttgc aggtggatcc gatattgaat 780
atctggactt ctataagcct gtcgtgtggg tctggatcct tgtagggctt gcttactttg 840
ctgctgtcct gagcatgatt ggagattggc tccgagtgat atctaaaaag acaaaagaag 900
aggtggggaga gttcagagca cacgtgctg agtggacagc caacgtcaca gccgaattca 960
aagaaaccag gaggcgactg agtgtggaga tttatgacaa gttccagcgg gccacctcca 1020
tcaagcggaa gctctcggca gaactggctg gaaaccacaa tcaggagctg actccttgta 1080
ggaggaccct gtcagtgaac cacctgacca gcgagaggga tgtcttgcct cccttactga 1140
agactgagag tatctatctg aatggtttga cgccacactg tgctggtgaa gagattgctg 1200
tgattgagaa catcaaatac ccctctcttt aaataacctt aggcatagcc ataggtgagg 1260
acttctctat gctctttatg actgttgctg gtagcatttt ttaaattgtg catgagctca 1320
aagggggaac aaaatagata caccattat ggtcatctat catcaagaga atttggaatt 1380
ctgagccagc actttctttc tgatgatgct tgttgaacgg tccactttct ttgatgagtg 1440
gaatgacaag caatgtctga tgcctttttg tgcccagact gttttcctct ctctttccct 1500
aatgtgccat aaggcctcag aatgaatgag aattgtttct ggtaacaatg tagctttgag 1560
ggatcagttc ttaacttttc agggctctacc taactgagcc tagatatgga ccatttatgg 1620
atgacaacaa tttttttttt gtaaatgaca agaaattctt atgcagcctt ttacctaaga 1680
aattttctgt cagtcctta tcttatgaag aaacagaacc tctctagcta atgtgtgggt 1740
tctccttccc tgccccacc cctaggctca cctctgcagt cttttacccc agttctccca 1800
tttgaatacc ataccttgct ggaaacagtg tgtaaaatga ctgaagtgat gatgcccga 1860

gatgaaatag atgccaaatt agatggacat tgaagcaaca ctcagcgttg cctagcgtta 1920
 aaggcactgc agagaaatga ggtgcagagg tggcccctct gagtatttat ttgactcagg 1980
 taccagtggg acatatatac agtghtaatta tgaccaggct ggtaaaattg gctgctcgca 2040
 aacaatcccc ttttttctg gcagtatttg gaatttatca tttattaata actatacatt 2100
 tttaaaatgc agaaagaaaa taatttcctt aaatataatt gcaaactgat ttcttttact 2160
 tttttgtgtc tgggggtggg agctgtatct gaataagtgg cattcagatt aggggtcttga 2220
 aaaataaacc cagaatcttt aaaagaagca aataaactaa tagacgctta ttttccaaaa 2280
 tttaaattta agctagaaat gtaaatattc aattaatttg ttaaagtagc ttttataaag 2340
 ttaaaaaaaaa tccaaccaa attttagaaa gtcaggctct tttagaaaga aagctacacc 2400
 catttcctca aataactgtt ccgaaaattt atatggtgga atgcgccatg tataaactgt 2460
 gaattgtatt gacaaataaa gtttghtaatt aaagtc 2496

<210> 440

<211> 2011

<212> DNA

<213> Homo sapiens

<400> 440

tatgcgctcc aagaagccca agaaacatcc caaagtggcc gtgaaagcca agccctcgcc 60
 ccggctcacc atctttgacg aggaggtgga ccctgatgag gggctctttg gcccgggcag 120
 gaagctgtct ccacaggacc cctcggagga cgtgtcatcc atggaccccc tgaagctatt 180
 tgatgatcct gacctcggcg gggccatccc cctgggtgac tccctcctgc tgccggccgc 240
 ctgtgagagt ggagggccca caccagcct cagccacagg gacgcctcca aggaactgtt 300
 caggtaccac ctgtccccag cggcgcttgg ccagctctga gagtgtcctg gacagagcca 360
 agggcccggc tcattgccc gtctcagccc cagcctctc tgaggggagg accccaggcc 420
 tgtgaaaagt agaagcctgt ggggtgcacat tgggtgagag gcggtgaagg gggctgaggg 480
 ggaggatccg cagcccaggg ctgctcagct agttccagaa agagagaact ttgtgtgcac 540
 aaccagtctt tcttttcaca atcatatatt aacagtttat gtaaagaata attaaattat 600

ataattgcaa gagcaggtat aactggcata agcaagtttg ggaacaaatt aaacggactc 660
atggcagcat gcagcccacc cagcgagggg gcaaagtgca gatgtcctgg tgatggcctc 720
tctgccggag ggcccgggtca gcagctttca cagaaggaag ggagaatgag gcctcagctg 780
tcacatggag gtcaattggc agaacctgtg ccggtgacag ctctatttc ctgagtcctt 840
gctgtgtacg cagtaagcca gactccttac acgctctctt atgtaatctt cacgacagcc 900
ccctaagggtg gatgctatctt tctccatatt ataagaaatc aagtgtggga cgccacctgg 960
ctaagacccc tgctctgccc ctggcctggc ctctccactt catcagggaac tgtctgagca 1020
cttggctggg tgatctgcct cccacccag ccccccagtt ctcccaggc ctttacctcc 1080
actggccaca ttctcagcag actcagtgtt gtgctgtctt ccagctcca ctccatgctc 1140
caggacacag gactgtgcct gggattcaga ggaagccagg ccgcctcttt ccaggaacgg 1200
cttatgtgac accaaggcat gcaggccctg gaggctgtca tctgtacccc tcattagcag 1260
cctcgggcta ttagacagcc ctgcaagtgc ccgccaagcc tgagtcaccg tgacggcttc 1320
tggtatttac atgtcccaa ggcccctggc atctgttcac tctcatcctg tgtcctcgt 1380
cctgacatcc cagcgggctg gaagaaacca ggattgttat tttattagag ggaaaccgag 1440
gcacagggaa atgaaatact agagtctgcc tgcggagcag cagggccagg ccgagcatgt 1500
ctaggagtcc atgtgtcca gtgggggtggc tctcgtggga ctttctggc ctagtttatt 1560
ctaaatccgt tacttcccaa cctgtgttct gcagaacgtg gtacagtggg gtggtcaaag 1620
gctatcttca aaggggctct gtggctgatg aattggggaa atgccacaaa aagcagggt 1680
cgtagtgcgc gggccagcac cacatggcac ttcacgttct cattcatccc tgggcccccc 1740
gctctgtggt gccccttagc atcccgcaga gcgcttgggg agtccctgct caaaaagtgt 1800
gggtcccga ccccccactt cacttttagca gacatctgct aatgaaagga ttaactgctt 1860
ttcttttttt taaattcaga caaattcaaa aagagccgta acactgggat tagcttcttg 1920
agagcaggaa ccacattcat tctttgtgtc tgccctgtga ctatccaggg agtagttgga 1980
cttcctcata ataaagaatg ttctgatagc c 2011

<210> 441

<211> 2676

<212> DNA

<213> Homo sapiens

<400> 441

ttacaatagc	taccatgtac	ttaatgttta	ctacaagcca	ggaacaattt	taagcactct	60
ataggaatta	acttacataa	aacagattat	tttattattc	aatttacaga	ccaagtttgg	120
tgtgtatacc	atttttaa	gaatttgtgt	tttattagtt	acctatagtt	ttcttcttca	180
gtgacatatac	cacagcttta	gttttagcaca	agcagggcat	taaaatctgt	ttaatgaatg	240
cacggttata	ttttgtctcg	gaatgtatag	tcttctttat	ttataccaga	ttttgatttc	300
atctccattt	ttcctatgct	tattctttcc	gtgttcta	agactgaggt	cctcttctct	360
gggactttcc	taaaggctgc	tttagatttg	tggtagtagg	aatgggactg	acagagtgga	420
tgaagtcaag	tgctgtgtgt	gcagagaggg	agactttgat	gacaatggct	atcagccctg	480
cttatgactc	tctgctctgt	tttgcttctt	gtaggctttc	agttctgaaa	tggcaaagag	540
gtccaagatg	ctgagtttga	acaattacag	tgtccccag	tcaaccagag	aggagaaaag	600
agaaaatggg	cttgaagcta	gatctcctgc	catcaatctg	atgggattca	acgtggaaga	660
gatgtgtgag	gcccacgcat	ggatccaaag	aatcctgagt	ctccagaacc	accacatcat	720
tgagaataat	catattctgt	accttgggag	aaaggaacat	gacattttgt	ctcagcttca	780
gaaaacttca	agtgtctcca	tcacagaaat	tatcagccca	ggaaggacag	agtttagagat	840
tgaaggagcc	cgggctgacc	tcattgaggt	ggttatgaac	attgaagata	tgctttgtaa	900
agtacaggag	gaaatggcaa	ggaaaaagga	gcgaggcctt	tggcgctcgt	taggacagtg	960
gactattcag	caacaaaaaa	ccaagacga	aatgaaagaa	aatatcatat	ttctgaaatg	1020
tcctgtgcct	ccaactcaag	agcttctaga	tcaaaagaaa	cagtttgaaa	aatgtggttt	1080
gcaggttcta	aaggtatacc	taacaaaggg	gaagatttgg	ctcattttgt	tgtttaattaa	1140
cttgtttctg	tagccaaagg	aaaagctcac	ctgctgatga	ttctaagctg	gctgctcatg	1200
gacttggaat	cctaggtcag	taagactgaa	aagagagcag	ggcagggcag	gcacgaggga	1260
tatagttgga	atcgggaggt	aggaatgaca	tcaggacaca	cagaagcaag	gattccagat	1320
ccaggaagcc	cgtctttgag	caaaataaaa	gaagtggaat	agcatttatc	acactgtgtt	1380
ataattgttt	acctattttt	ctatctcact	aaactatgag	cttaagaggg	cagagactat	1440
gtctaggtca	gtgaattttt	gttaaaggaa	tttattagag	aaggggcagg	gaattttgaa	1500
gaacgaatca	aataggaga	ggattagagg	gaggagagac	tcttttgcaa	ctttctatga	1560

aaagcgaatt gcatgcaaag tagtattatg cacataagct cctttatttt tgaagcagta 1620
 tagcaggcaa tttaaagagc ggttctctag cctctttttc agtcttttctt ttctatgggtt 1680
 ctaggtggag aagatagaca atgaggtcct tatggctgcc tttcaaagaa agaagaaaat 1740
 gatggaagaa aaactgcaca ggcaacctgt gagccatagg ctgtttcagc aagtcccata 1800
 ccagtctgc aatgtggtat gcagagttgg ctttcaaaga atgtactcga caccttgcca 1860
 tccaaaatac ggagctggca tatacttcac caagaacctc aaaaacctgg cagagaaggc 1920
 caagaaaatc tctgctgcag ataagctgat ctatgtgttt gaggtgaag tactcacagg 1980
 cttcttctgc cagggacatc cgttaaatat tgttcccca cactgagtc ctggagctat 2040
 agatggcat gacagtgtgg ttgacaatgt ctccagccct gaaaccttg ttattttttag 2100
 tggcatgcag gctatactc agtatttgtg gacatgcacc caggaatatg tacagtcaca 2160
 agattactca tcaggaccaa tgagaccctt tgcacagcat ccttggaggg gattcgcaag 2220
 tggcagccct gttgattaat ctctacatca ttttaacagc tggatatggc ttaccttggg 2280
 tgaactaacc aaataatgac catcgatggc tcaaagagt gcttgaatat atcccatggg 2340
 ttatctgtat ggactgactg ggttattgaa aggactagcc acatactagc atcttagtgc 2400
 ctttatctgt ctttatgtct tggggttggg gtaggtagat accaaatgaa acactttcag 2460
 gaccttcctt cctcttgagc ttgttcttta atctccttta ctagaggaga taaatatttt 2520
 gcatataatg aagaaatttt tctagtatat aacgcaggcc ttttattttc taaaatgatg 2580
 atagtataaa aatgttagga taacagaatg atttttagatt ttccagagaa tattataaag 2640
 tgcttttaggt atgaaaataa atcatctttg tctgat 2676

<210> 442

<211> 2271

<212> DNA

<213> Homo sapiens

<400> 442

tactaactcg gcatggccag ctcgacagag agccagtttg ttaaacagct tgggtggggga 60
 gttcatccgt cttgatgttg ccctgaatct acaacttcat attcaatatg ctaaataatc 120

ctcttttctt ttcgtgtgat tcatgatagt gtcacccca tcaagcttta tctttctcat 180
ttcttgcaat tttctcttaa ggacttgac acgaagtctg tatgtccgta gggctttgta 240
catcactctt gcaaaaggac tctcttcgtc ttgctttcag acttcttcag gtcacaatgt 300
aaaagggtgtt tcttattgtg gatcacagct gaagaatttt gaagctgctc agctaaagga 360
ctttccctct gcgaagctgt gatttctctga agtggccaaa gaaattatgc agtaagaccc 420
tttccagttt tcatcctggg tgtttctgaa caggaacata tctcattgaa gtatttgac 480
ctctacctac agacaaggaa aaggcttgga gcacctccat tcattgtgcc aacaggacct 540
gaatgaccga ttgtttcttg cttactactt gtggtaact aagtagagat tcataagacc 600
tttatagaac cactgacaac actgtgacca aggaaacttc catcgataga agagtggctg 660
tgaccgaag gaatgtctga cccccacagc agtcctctcc tgccagagcc actttccagc 720
agatacaaac tctacgaggc agagtttacc agcccagact ggccctcgac atccccgat 780
actcaccag ctctgccct cctggaaatg cctgaagaaa aggatctccg gtcttccaat 840
gaagacagtc acattgtgaa gatcgaaaag ctcaatgaaa ggagtaaaag gaaagacgac 900
ggggtggccc atcgggactc agcaggccaa aggtgcatct gcctctccaa agcagtgggc 960
tacctcacgg gcgacatgaa ggagtacagg atctggctga aagacaagca ccttgccctc 1020
cagttcatag actgggtcct gagagggacc gctcaggtga tgttcgtcaa caatcctctc 1080
agcggcctca tcacttcat agggctgctg atccagaatc cctgggtggac aatcactggg 1140
ggcctgggga cagtgtctc gaccttaaca gctctgcct tgggccaaga caggtctgcc 1200
attgcctcag gactccatgg gtacaacggg atgctgggtg gactgctgat ggccgtgttc 1260
tcggagaagt tagactacta ctggtggctt ctgtttcctg tgacctcac agccatgtcc 1320
tgcccagttc tttctagtgc cttgaattcc atcttcagca agtgggacct cccgtcttc 1380
actctgccct tcaacattgc agtcacctg taccttgacg ccacaggcca ctacaacctc 1440
ttcttccca caaactggt agagcctgtg tcttcagtgc ccaatatcac ctggacagag 1500
atggaaatgc ccctgctgtt acaagccatc cctgttgggg tcggccaggt gtatggctgt 1560
gacaatccct ggacaggcgg cgtgttcctg gtggctctgt tcactctctc gccactcatc 1620
tgcttgcatg cagccattgg ctcaatcgtg gggctgctag cagccctgtc agtggccaca 1680
cccttcgaga ccatctacac aggcctctgg agctacaact gcgtcctctc ctgcatcgcc 1740
atcggaggca tgttctatgc cctcacctgg cagactcacc tgctggccct catctgtgcc 1800
ctgttctgtg catacatgga agcagccatc tccaacatca tgtcagtggt gggcgtgcca 1860

ccaggcacct gggccttctg ccttgccacc atcatcttcc tgctcctgac gacaaacaac 1920
ccagccatct tcagactccc actcagcaaa gtcacctacc ccgaggccaa ccgcatctac 1980
tacctgacag tgaaaagcgg tgaagaagag aaggcccca gcggtgaata gccatgttcg 2040
gggaagaaac gctctttgcc tgacctgatg tcctctccct gtgttctctg ctctggttca 2100
atcagttgca gcactcacct tctttgcctc tccttgccacc tgtgtagaac caagcacacc 2160
tgtaactttc ttccctgaa gctgattttc attctctgcc agaactcca taactatcta 2220
ttgtgcgaca ttaagggatg ttggtattac agtaaaattt ccggagttag c 2271

<210> 443

<211> 2293

<212> DNA

<213> Homo sapiens

<400> 443

ttcttgagta gctgggacta caggcgcgtg ccaccatgcc cagctaattt ttgtattttt 60
agtagagatg gggtttcacc ttgttgcca ggatggtctt gatgtcttga ccttgtgac 120
cgctgcctc agcctcccag agtgctggga ttacaggcat gagccactgt gcccagccta 180
aaacagttat tttctttaa gtcttgctta ctgttcagag gaaattgttt tattgtctcc 240
aggaaaatcc agaagtatgg ttcattccgac ctgtttcacc ctctttactg aaaattttgg 300
ccctggaagc tacctacctg ttaccccttc gcttggcact cctagatgag atgatgtctg 360
acctaaccac cctggtggat ggttacctaa acacgtatcg cgaagggtct gcagaccggc 420
ttggaggcac tgagcctaca tgtatggagc tgccagagga actgcttcaa ctcaaggact 480
tccagaagca gcgcaggag aaagctgcaa gagaatatag ggtgaatgca cagggactcc 540
tgataaggac agtgctacag ccaaagaaat tagtgacaga gacagcaggg aaagaggaga 600
aagtcaaagg cttcttattt ggtaaaaatt ttaggataga taaagctcca agttttacat 660
ctcaagactt tcacgggat gtgaatttac tgaaagaaga atctttgaat aaacaagcta 720
caaactctca acatctacct cccacagagg aaggggaaac tagtgaggat tccagtaaca 780
aactcatttg cacaaagtca aaggggctcag aggaccagag aataactcag aaagaacact 840

ttatgacacc caaacatgag tttcaggcaa gtttatcttt gaaagaggag acagaacagt 900
tattgatggt ggaaaacaag gaagatttaa aatgcacaaa acaggctggt tcaatgtctt 960
cctttcctca ggaaaccaga gtgtctccaa gtgacacttt ttatcctatc agaaaggctg 1020
tggtttccac actccctccc tgtccagcct tggagaagat cgattcctgg ataagtcctt 1080
ttctaaatct gccctagaga tgggcagttt gttcttaagg ccatgcagat ggcttatttc 1140
ctttgccatc agggctttcc acagtgccca ggtttctcat gttgtaaag tagtaatgct 1200
tcagtcacag gggaaaatta tctctcttg cttactcctg tgttcctggt atgcggagaa 1260
tgagaatgaa taagttaa ataatgaaga gtataatttc tgattatgtc actgtgtaga 1320
aatgttctca gtgaccagag tgcattattt ttcataattt gggtttagag gatttgaaga 1380
aaggaagaat cttgggctta gtatcaggaa gactccatca ttttcaaatt ttgttttgct 1440
tcttgacttt tggattcctt tgaagagacc tggtaaaact attaacaatt catttaaaaa 1500
attggtacct gataacttta ccagtacttt tttccttttt atttatttgt tttatttatt 1560
tttttttacc gctccttggt gagcagggtt acaccatagg cagtgtgcc agagtaacca 1620
cttttttctt ttttaaaata taatattaac tttatgtttg aatgttgaat gttttgtctg 1680
tctcttaggc aaataatggt ataggaatca ataattta atttgtttta tttgtttttt 1740
gatggagtct cactgtgtca cccaggctgg agtgtagtgg tgtaatctct gctcactgca 1800
acctccgctt cccgggttca agcaattctc ctgcctcagc ctctgagta gctgggatta 1860
cagggtcgta ccaccacgcc cggctaattt ttgtattttt agtagagatg gggtttcacc 1920
atgttggcca ggctggtctc gaactcctga ctgacctgt ggtccacctg ctttggcctt 1980
ccaaagtgtt gggattacag gtgtgaggca cgggtgccag ccaatatctt tattttaatt 2040
tgtttttatt tcctttattt ttagctgggt ttgtccattt tcctaacaaa gcagggaccc 2100
tggttttctt tttagtctgt ctgttatata aacttgaagc ctgactccat tctatttgcc 2160
tgaggttagt atactttctt aggggtgaaag gaaggcagct tgtattgagc cttttaaggt 2220
attgaatgct tgcaaattgc taacattctt ttgtgtaaaa taaccaataa acctgttttg 2280
tcataactcta ctt 2293

<210> 444

<211> 2598

<212> DNA

<213> Homo sapiens

<400> 444

ttggctccgg	ttgccgagct	gctcccagga	gattcgTTTT	cagaggatct	gagaaaaagc	60
cggcagggtt	gatggcagct	ctttcttctc	ggtgccctcg	cagtgcagca	ggccccgctt	120
atttgcaaga	agcagccagg	tcagcccact	gggcctcccc	acctcttggt	ccccttcgca	180
catttcagag	ctctctcttt	tcctctgggt	cctcccatc	aagagaggag	gaggaggagg	240
gggtgagcct	gttgcaacg	gcgttgggtg	ggcaggggcc	ggttcccctg	tttctgggga	300
gccttttctg	tgctggttgc	aggcaggggc	cctcagtgtg	gagctgtggt	gagcctgtgc	360
cccgctcgat	ttgggtcaca	gcctccgtga	cccctagccc	ccgccaggca	ctccaccct	420
gcagtgattc	gcttgatatt	ttaaaagcac	tccatcttct	gcctgctgcc	ttctctccat	480
tcctctgggt	ccaggttttc	gccgagccat	ctaataaaga	atccaggggg	gagaatgatg	540
ggggcgagga	gagggaaagt	gctaacattt	attaagtgcc	cgctgggtgc	ccagcacttc	600
ctcaacaact	agagcagcgg	tctttctgct	ttctttcagc	tgcataacce	tttctccat	660
ccaaaatcgc	aagcctaacc	tggccgtgta	aacaaacacc	agggaagcgc	ctctgatgga	720
aggggatggg	gcacctaagg	ccctgtctct	caccatgtag	cactctcccc	actcctaaca	780
gacactttgg	tgcttccatg	aaacctggat	ctaaaagctc	tgtgctcatt	aatctacat	840
ataactctcc	aaggaaatag	tatccccatt	tttataatac	caagctaaag	gccagagagg	900
gagagtgtag	gatcacacaa	TTTTTTTTTT	TTTTTgagat	ggcgtttcac	tgtcacccag	960
gctatagtgc	aatggcgtga	tctcagctca	ctgcaacctc	cacctcctg	attcaagtga	1020
ttctcctgcc	tcagccttct	gagtagctgg	gattataggc	gcgcgccacc	acgccagct	1080
aatttttgta	ttttaataga	gacgggggtt	caccatattg	gccaggctgg	tctccgagct	1140
cctgacctca	ggtgatccgc	ctgctttggc	ctctcaaagt	gctgggatta	taggcgtgag	1200
ccaccgcgtc	cggcccaggg	acacgattat	taaagggcag	agagccagac	tggggaggga	1260
ggtgtgctcc	attcccaagc	ccatgcttgc	cctggctctg	ccgggaagac	agtaggtgct	1320
ttgcttcctg	agaaagggca	ggaagaggcg	tggctcctcc	agctgtacag	acgaccaggc	1380
cagatccaca	tggccccgtt	tgggtgcttg	atgtctggta	aactgcctgc	caaggaggaa	1440
cgcagagggt	aagcacctgg	tccgacccat	catttcacgc	tgaatcgctt	gttgacccat	1500

ctcaacttgac tgactcctgg gatggaggcc tggctccctc caaggcagcc ccttgcggtg 1560
 gaagaaaggc aatggtgtga agcctgtctg gttgtaccct ccagctgcgg gtccttactc 1620
 cagctctcag aaccagaagg aatctgtcta attgtctatc tactggagag cccttgagag 1680
 gggcttcttc aaggtcctgg gcactccaga atgttcccct ccacttaaaa aacacaagga 1740
 tggctctccag gcacctgagg aaacacagtc tcctgccctt taggatcagc cacctctgag 1800
 gccaaagacct gaccagatt ccggtaccct tcacagaagg agccaccaca gtggagaagg 1860
 aagctcatgg cttttgggca agagcctctt tgaaaaggag gaagagctcg caaagggtga 1920
 cggcagagag atgcccagaa tcttgtagga ggaaggagaa tgcagcctaa cttgctggaa 1980
 ggattcagga gacgtgtgag taagagccaa gatttcccag atcagcctac agccaagata 2040
 agcacagctt tctaccaac ctgcacctca ccacagagaa tggaagaatc actcagccat 2100
 cctgtatatt gtagcaatag tgtatggtta ttttttctag gcactgagtt ttgggatgat 2160
 ttgttatgca gcaacagctg gctgctacag agattgtgcc caccctcaca gcccctgga 2220
 tctgtgtgct cgcactgagt tttgggatga tttgttatgc agcaacagct ggctgccaca 2280
 gagattgtgc ccaccctcac agccccctgg atctgtgtgc tctactgaa aagcaaaagt 2340
 aacttctgtt tttctcttct ctgtggccac cagggtgtgt gcccaaacag aaaggcaatt 2400
 tgcttagtgg tggaggttct gacctccaga gtcagacagt cctggaatcc tatcccagct 2460
 gtgtgacctg cagttggctt cttaccact ctgtgcctca gtgtctccat ctacaaaagg 2520
 cacagtttct accccatcag gttgtggtta ggactagaaa agacattgga agtaaagtgc 2580
 gtgacaccaa agtgctcc 2598

<210> 445

<211> 3651

<212> DNA

<213> Homo sapiens

<400> 445

catgcgctcc acgaggcgcc caagttcacc gtggagaccc tggagcacac ggtcaacaac 60
 gactcggagg tctgggggtct cctgcagccc taccagcacc tgatctgcgg gaagaacgcc 120

agcggggtgc tgtgcctacc agacagcctg aatcttcaca gagaccacaca gcggtcaaac 180
aagccagggg aactgcccac gttcagccag tcggagctga ggaccatcga gcagtctttg 240
ctggccacgc gcgtaggcag catcgccgaa ttgagtgacc tgggtgtccc tgcaatgcat 300
cacctgcagc ccctcaatgc caagcaccac ggcaatggca cccccctgca ccacaagcag 360
ggggcactgt actgggagcc cgaggccctg tacacccttt gctatttcat gcaactgcca 420
caaagtgaat gggaaaaccc caacgtggag ccttccaaag tcaacctcca ggtggaaagg 480
cccttcctcg tgctgccgcc gctgatggag tggatccggg tggccgtggc gcacgccggc 540
caccgccgca gcttctccat ggacagcgac gacgtccgcc aggcggcccg gctgctgctg 600
cccgccgtgg actgcgagcc gcgccagctc agggccgacg actgcttttg tgcattctga 660
aagctggatg cgggtggccat cgaagccaag ttttaagcagg acctgggttt ccggatgctg 720
aactgtggac gaacagacct ggtgaagcag gcagtgtctc tgctggggcc cgatgggatc 780
aacaccatga gcgaacaggg catgactccc ctgatgtatg cctgcgtccg tggggacgag 840
gcgatgggcc agatgctgct ggatgccgga gctgacctga atgtggaggt tgtcagtact 900
cctcataaat atccatccgt ccaccccgag acccgccatt ggacggctct gacttttctg 960
gtgttgcatt gacatattcc tgtagttcag ctctcctgg atgctggggc caaggtggaa 1020
ggctcagtgg agcatggcga ggagaactac tcggaaacac ccctccagct ggcagctgct 1080
gtaggaaatt ttgagctggg tagtttgctg ttggagcgtg gtgccgatcc cctgatagga 1140
accatgtaca ggaatggaat ttctacaacc cccaggggtg atatgaactc ttccagccag 1200
gctgcagccc acggacacag gaatgtgttc cgcaaactgc tcgcccagcc agagaaggag 1260
aagagtgata tcctgtccct ggaggagatt ctggccgagg ggactgacct ggcggagaca 1320
gccccgcccc ccttgtgcgc cagccgcaac agcaaggcca aactgagggc cctgagggaa 1380
gccatgtatc acagcgtga gcatggctac gtggatgtca caattgatat caggagcata 1440
ggcgtcccgt ggactctgca cacgtggctg gactctttgc ggatcgctt ccagcagcac 1500
cgcaggcctc tcatccagtg cttgttaaag gactttaaga ccattcagga ggaggaatac 1560
acggaggagc tcgttaccca aggcctgccc ctgatgtttg agatcctgaa agcgagcaag 1620
aatgaagtga tcagccagca gctgtgcgtc atcttcacac actgctacgg gccctacccc 1680
atccccaagc tcacagaaat caaacggaaa cagacctcgc gcttgatcc tcattttctt 1740
aacaataaag aatgtctga tgttacattt ctggtagaag gaagaccatt ttatgctcac 1800
aaagtgtgtt tatttacagc ctctccaagg ttcaaagcac tcctctccag caagccgaca 1860

aatgacggca cctgcataga gattggttat gtgaaatact ccatctttca gctggttatg 1920
cagtatctct actatgggtgg cccagagtca ctgctcatta aaaacaatga gatcatggag 1980
gtaagggatc catttgtgtg ttggctatca taggtccctt gggtagtggt cacttctgta 2040
aactcgggtc accagcctgc atggaagtgt ctggaaggac ccgtgttggg ttttcatttg 2100
gatgaagact tggggctctt gttccttctt gactcctcag tcctcccaa caggaagggc 2160
ttctcatcag agaccttccc tggcaggctg gggtagtagt gcacttgctt gcctgactgc 2220
ttttagtagc cactgagtga aacccaattt taactggcat tggtagtaag ggggcaggga 2280
aggggaaggaa tttgactgaa aagtctgagg ctacagctga ggcgttaata gtgatcat 2340
caggaaatat cctagatgac gtcttctccc ttgtactaa taaaagaatt atatccccta 2400
aaaacatccc tcaaatcaca acactgtctg ttcttccaag atatggaagc tgagggcaga 2460
ttacagtctc ctctgggtt tcctcaaact gagcatccca cagtcatgaa gcccacgcct 2520
gcttcttca ctctcccag cccctgtct gcctcttgta attcaactgg ttctagcccc 2580
gcctgtctag gagtcttggt tctgcctgct ttgtccaaa gccaagattt tcccctgttc 2640
cttgccaaaa gtggaaatct tgttcatttt cctaattgaa actgggagct ttgaaccaga 2700
agccaaaaat caccccaat taatcctcag caaaagagcc aggatctcgg tcagttatct 2760
gacgtctggg gggtagctg ctgatgagag atgtcaggac acaatcaact gttcaagagc 2820
agacctcaca cagtgggttac aacacggaag ctgggccaga ctagtctaaa tccaggctcc 2880
actgcttctg agctgtgtga ctgtggacaa gttatttaac ctcatatcct cagcttctt 2940
gcccataaaa tggggataac tatctacctc actgggtttt ttagaggatc ttaaaatatg 3000
ctaagggtgt tagaacagt cctggcacac agtgatcgcc aataggacta tgtattcact 3060
gcaggccac ttatcctttc ttcctattct gtgaaacctt ccgtggteac tctctccca 3120
cccaaacaca cacatggaca cacagtgact ctcttgtct cctggactac tcctctgatg 3180
gttttagtct cgaggatgtg ggcttatttg taaacaaaag tgcgctgggtg ttacaacta 3240
atttttgtgt gtgtgtgaaa cagtctcact ctgccccag gctggagtgc agtggtgcaa 3300
tttcggctca ctgcaacctc tgcctctgg gttcacacca ttctctgcc tcggcctccc 3360
gagtagctag gattacaggc acctgccacc acaccagct aatttggtgt atttttagta 3420
gagacgggtt ttcacatgt tggccagatg gtctcgaact cctgacctca gcctcccaa 3480
gtgttgggat tacaggcatg agccactgca cacggctgtt tacaactaac tgatcacaac 3540
cagttatgga tttctgtatt ccttctccac tcccactgct tcatttgtct agccttaaca 3600

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa g

3651

<210> 446

<211> 3299

<212> DNA

<213> Homo sapiens

<400> 446

ccttgggatt atttaatctg gctcctcttg tggttatctt tgagaaggca ccgtggtcct	60
agactctttg ccctcaatag ggcactctgct aaaagctttt taaaacttat cattagctgg	120
gtgtgggtggc acacacctgt agtcccagct gttcaggagg ttgaggcagg aggatcactt	180
gagtccagga ggctcagtga ggctgcagtg agctgtgacc acacctgtga ataaccagtg	240
cactccagcc tgggtaatgg agtgagaccc tgtctctcag aaataaataa ataatcttt	300
gcagggagaa caggggagac gattcctttc ttaaattgcat ctccttgacg cccacaggcc	360
caccactcc ctggccctcc atagtctcct cctgggcca aatgtgagga cagtacagcc	420
tcagccagga gcccttctga ttccttggtc tcagactccc attggaatac gatctggggc	480
cgttcagtca tttggagtgg tttttcgta cttgacttct cggaatgtgt tatctcttat	540
ttttatctct ggaaattggt ggtgtccgtg gtcccaggat gctggagggtg gaaattcctt	600
gggtttcttt cattatactt gctcgggctg gcccatctgg tgagtctgcc agctgtgtga	660
accaggtgc tgtttgaagc cttccccag taaacaagt cgtcaagtct gagtgagaca	720
cttggcaccg tcacaccgt ctccttcac atccccctt gtacgttctc cagcgacaca	780
tccccagggt tggacagggc accctcatat tggcttcagg gacataggag ggccagtcct	840
gacccacgt tgtgtgtgtg actttggta cgtggcccaa cctctctgag tctatcccc	900
ctccccctc ttaaggtaaa gacatgaagt gcttgttgtg aagattaaat aagctaataa	960
tgtcaagtaa atgttagctt tgcagtaatc tttcctgtcc gccacgttac tgcttttttc	1020
gagacccttt tctggagtta ctcccagcaa gctgttactc agacgtcctg ttggttaata	1080
aagctgtccc tgcagcagtt ctgctattgt atagactcag tcttaaaata gtgggcttga	1140
tgtgacatat ttcttcataa tattgtgtat gtgcagcctc tgtgtaattg cattatgcac	1200

ctttattgca tagttgaagc agtggcagga aaggatgcc a tatgtgttac tgggagatta 1260
ttcagtgggt atttttctc actcttccgt ttcagtacca gtgaaggaca agaaacttct 1320
ggaggtcaaa ctgggggagc tgccaagctg gatcttgatg cgggacttca gtcctagtgg 1380
cattttcgga gcgtttcaaa gaggtcagag ccttgtggat gtctgtaa at gaaagcaaat 1440
ctctgggtct tcagatctct tttttgccat gaattaattt gggcaatgaa ggccttgttg 1500
tctgaaagca gtaagttatg tagaggatga caggaggagg tgctaggcct tggacttctg 1560
tggttgattg gccctttcaa aggctggctc tgagatatta cagccaagaa catgtttcct 1620
gttgcttgga atcagtatgt ctgcctctgt cttagagaaa tcctaagact tctttaagag 1680
gaaaatgaat tggaaccgta gtgggcatta gtctataata tgatgctctc ctccctgcc 1740
gaacttcagg acaaataattt gaaatggcct atcttggcct ggtgtggtgg cttatgcctg 1800
taatccccgc acttcgggag gccaaaggctg gaggattgct tgagccgagt ttagaccagc 1860
ctaggcaata tggagagacc ccatctctat aaaaaaacc acacaagaaa aattagctgg 1920
ctgtgggtgg gcatgcctgt agtcccagct actcaggagg ctataagctc acagccaaag 1980
gggagagggt gaatccaggt aggcctagtt caggagctgg tatgtgctta tagttcaggc 2040
tatggggatg agagacctta ctggcatttg tgcttgtcat ctttatcagc cagtgaatgc 2100
agggcgaggg gcttaaacag ccagagcagg actaggtccc tgaatgtcag ccagactcaa 2160
ctgtgtgctc aacttcactc aaatgtgaag ccagcaggg cagtgagcgc ctcttgcggt 2220
tgcaggttac taccgtact acaacaagta catcaatgtg aagaagggga gcatctcggg 2280
gattaccatg gtgctggcat gctacgtgct ctttagctac tccttttcct acaagcatct 2340
cagtgagtgc ctctgcggcg tcttgccctt agttcccatg agagggtggg ggtgactgat 2400
ttcattagat acagcagccc accttcttct gaggctgagg gaccttagt taaagttcct 2460
tatgtttcca cctaaaagaa ttggaggggac ctatcagagt acagtatgtg ggatattggt 2520
tgaaatgaga aaattgtgac aaagagaaca caggaaaatc aagatgaagc cagggtaaag 2580
agagtactta gaagcattct ttaaaataca gcacactgtg aaaatttggc tcgattttcc 2640
tagtagccaa tgcagaaaga gaaatgagtt gagtgggata atctgggtacc ccagaaaagc 2700
atggctgttc cggctctgag gcttgagagg agcttgtctg gtgggagatt ggcgggagg 2760
gtcgggtggc gcctctgact aggctgtttc tgacagtgtg gtgtacacc cctaccccca 2820
cctcactccc attctgtggc accagggcgg tcctgcctct gaaggacggg ttctctgggg 2880
ctgtttgtct gagcgtgtgt tccctctgtt ccttctggaa agaaagtggg tggccagggt 2940

gcaggttggc tcctgaggtg tctttgtgcc ccccggtct gctgattctg cagagacacc 3000
ggcaggcggg tcatgggtca tctctgaagg gaattctcag gaaggctttg tgtgatctca 3060
gcctgcttcc tgccatgctg tgccttact gtaacctttt aagatactta ccatcttgcc 3120
ttcctgactt cagagcacga gcggctccgc aaataccact gaagaggaca cactctgcac 3180
ccccccaccc cagaccttg gcccagagccc ctccgtgagg aacacaatct caatcgttgc 3240
tgaatccttt catacctaa taggaattaa cctccaaata aaacatgact ggtacgtgt 3299

<210> 447

<211> 3827

<212> DNA

<213> Homo sapiens

<400> 447

atctggaagg ggagcggtag aacgtcaggg tatccacctg caccacctc ccaagtagct 60
tgaaaaaggg aggacagtct ttccccagca ggggtcggag ggccccctca ggaagcctaa 120
ggtcgtgcta gtgtggtgac cccatacat tcctccctgc tccccactgc caggaggacc 180
actgtcccca gccagccaaa gtaatgacac attccagccc tgcccagcat gctgaccttt 240
ggcctctaac cctcagtggg cccccaggtc agggcagggg cactgagtgg cctggctctg 300
aggaagggag tcaggggaag cctgtcccgg gaaggcccag gctgagaggc cctggctctg 360
gccaggctgg gatctgggtg ggaggctggg gctcttcttc ttccatctcc ttggtgacac 420
ccagcccagg ggcaccccct tccccagccc ccacctggag agacatggcc cctgccaagc 480
tggtcccttc aaatggatcc tttgtggact ttagctcatt tgtggaggaa cccaggtag 540
ggacgcccct tgttctcac cccacccca cttaggtcct gggccccac tgccaggctg 600
ggcccagctt gctcagtcaa ggggtgccca ggccccaga aaacacttgg agccatcggg 660
tagcgatggt ctatgcatg gggaacacct ccattggtgt ggccaagctg cccccattcc 720
tatccacccc tctccccacc ccgtcctgtc catgcgttc cagggcccca cggtccccag 780
gaggacgctt cctggccaaa gcccgaagcc tttggtgaga agccaattcc cacttgacag 840
aaggcgtcca tccattcatc tcattggcca aggacaaact ctctctggg acgtctggga 900

ctggcatttg tccccactc aaattatcaa agctttctgc tcagtcagtt gtgtggggat 960
ggtgagggaa gaggggtcac atgagggagg aaactgtatc catgcatgca tgataatgcg 1020
tggcagagac tgcaacaggg attgtgtgtt cagagatcat atgcatatgt gtagggctgg 1080
agcgtgtgtg tgtcttgaga ttgtgtgtgt tgcagtcac atacttatgt gttacagatt 1140
gtgtatgtta gccttgtgta tgtgtgcttg attgaggtgg tgtatttggg ttgaaattgt 1200
gtcatatgtg tgtgctatcc atctcgtgtt tagaggctgt atactgttagc ttgtgtaaga 1260
atgtgttttc aaaacagtgt gtgtattggg agtgatgggt atgtgttagg tatgtgatgg 1320
gttgtagaag cgtgtgtttg agagaattca gagacatttg aaggctgctg tgtgcatgtt 1380
tgggggtctg aaaagacagt tgtgtgcatg gatgtgtgcg tggggagaaa gaacgtgggt 1440
aagatgtccc tccccagccc tgagaccact gggtcacagtt ggccacctcc aacgggagac 1500
cttgtccttg gcctagagtc ctcccacct tggggggctc ctgcctgagg tcctcagaat 1560
cccactgcaa tggaccagc cagcgcccca ggaagccatg ctgggcccc gccagggcct 1620
atcccaaaag caggggccag ggagggggcg acttgccctgc ccctgaagcc cttgttccca 1680
ttggccccag tttgcattct gcaggttttc catttttagtg ggttctgctt ttatttcaga 1740
gacagacatg tgtcttctct gtccgtttcc aataggtaaa gccatatcag ttagactgca 1800
atactttaaa cacgagacaa aacaatccat atgtttaggg aaccagaaaa gtcccctggt 1860
ctgtcccttc tttggggagc agggcctcga cagctccagc tcccttgacc taccttctc 1920
cccgcacccc gccccacct tgtgccctg tgtccagccc ccagggggc ctgtgtctgt 1980
gtctgtgcct gtgtctgtga tggggagccg cctcgcaccc ctgttgtctg cttgtctctt 2040
tgtgtctgtt atcctgggca ggatgggtcat tctcaaaaac cctggggtcc tgggccagag 2100
acaggcaggg ccaggtccag gggccccagg cctccccagt ccagtgctg gagccccact 2160
tggacacaag tgttcagaga ggtccccctc tgccacttga caggacctt caaacctcga 2220
cagtgatgca aggacacaga gagtaccaga taggtagcag agaccaaggc gcagggtgct 2280
tcagatgagc aagagaacct agtcgaacca gataccccag gtgggccgga gggacccag 2340
accttcagag ggctgccctg gtgttctcca cagtgcagtc cctctgtatt ccagagtgg 2400
gatcggggct ttcagcccca ccctgatgcc tgccctccag gatggctggg ttagtctggg 2460
tccatgtccc agacctctt attctgtcc aggacagcag gacttcaggt cttcctgggg 2520
gtggatatag gagaaaattt ctgcctggca cacacctggc tccaaccact gccagtgtat 2580
cactcttagg ccaggggaa cacaatgact atcattactg atgcagacct ggctgtggag 2640

agcagcta at gtgtggccca gagagcctgt ctgtgtggag cacgtagtgc acagaatacg 2700
tgagagt tgc tctggcaggg gcagaatcct cacaggatcg cctgggaggt gaggtgtgtg 2760
tgacccactg gatgggaggg caatgagtgt gcacatacaa atggggcagt gtgcatgcaa 2820
cacacttagg ggaggagtgg cccagaatt cagcacgcac acaacacaca agggagagaa 2880
ccccagatg agaaaatagg aaggagcaat catttgtaga tgggtgaaaa aagaatgagg 2940
ttcaaggag cgtgcaccag gtgaggtgag cgtgtgtgct ctcagggaag ggcccaggat 3000
cccatgcctg ggaggagctg ccagagagaa gcaaaaaggc ggctgtggat cgccctgggc 3060
tgggcaccag tgacaggtca ggatctccaa acatggacgt cctcccctcc aaatccagaa 3120
gctcccagaa ggtgtcctta actgcaaagc tgtgcagggt actcctccag atggaatcag 3180
gaagtcgaga caccatccca ggtgtgtgta agagagagag agagaacagg gaggatacag 3240
aagtattgca gccagatcc cctatcaggg ggacagctgg tgggcaaagc agccacccca 3300
cagccttgtg gctagagtac agtggggtag accctccagc cccaatagcc ctagtaccca 3360
gctggcaggg ttgccaccc ctgctgtcca cctgctccat cctctagggt tccacaggcc 3420
cctgaccgca cagggaggct ggggccagcc tgggtctcca ggcctgagga catgcctccc 3480
accaa atgtc cctgctcca gtcccactcc tgtcacccca cgctctgcac tggggagaaa 3540
acgggaggtg ctctgtctgg ccctgggtgg gagcggggag tcctggtgag accccggtga 3600
gatggacat cctgccccg tgggggatcc cttttccac atccgtgctg tgtcattgtt 3660
gctctgcttc ctttcaatgt gtcagtgcct ggggggaggg gaggagcacc ccctcagccc 3720
ccctgaacct gacaaaagc catggctgtt gctccccct ttgtatgatg caaatgctga 3780
aatgtacaaa atcaaccatg acaacaaaga aaaagacctt gtacagc 3827

<210> 448

<211> 2452

<212> DNA

<213> Homo sapiens

<400> 448

tttaaaggga actggaggga aacacatcag catgttagta agtggctctgt tgtccagggtg 60

gtgaaatttc agatgatttt catttctcgt gcctgtgtct caggtcctct ggaaggcaga 120
caccagggtg gcattggagg tgcaggaggt ttattcgagg aaatttgact gtgagagagg 180
aaggagagag ggagcaggag gaggcaggga gagcctgggt ctggctttgc aggttgacc 240
cgtatgagtg gagagggtag gaaggaagtg cagtgtgag aaaggatcag ccaggcctac 300
tggaagccc agagcagagc ttgccagata caggaatccc acgtccattg gaaatggccc 360
agcaccgggg tctgccgtga gcagcctgct gtgagagcat ggcctgggcg tggaggtgt 420
cagctcactg cagtgtgca gagggccgca cgatacccct ccctggctgc gtggtccctg 480
tcttgggtgtg tcctgagtct gcatcacttt gtaaagcccc actcttctgc ccaggtacca 540
aggaaaggca gatgccccg tggccttggt ggttcacatg gccccagcat ctgtgcttgt 600
ggacagcagg taccagcagt ggatggagag gtttgggcct gacaccagc acttggtcct 660
gaatgagaac tgtgcctcag ttcacaacct tcgcagccac aagattcaaa cccagctcaa 720
cctcatccac ccggacatct tccccctgct caccagtttc cgctaaggag ggccccacce 780
tcagtgtgcc catggttcag ggtgaatgcc tcctcaagta ccagctccgt cccaggaggg 840
agtggcagag ggatgccatt attacttgca atcctgagga attcatagtt gaggcgtgc 900
agcttcccaa cttccagcag agcgtgcagg agtacaggag gagtgcgcag gacggcccag 960
ccccagcaga gaaaagaagt cagtaccag aaatcatctt ccttggaaca gggctctgcca 1020
tcccgatgaa gattcgaaat gtcagtgcc cacttgtcaa cataagcccc gacacgtctc 1080
tgctactgga ctgtggtgag ggcacatttg ggcagctgtg ccgtcattac ggagaccagg 1140
tggaagggt cctgggcacc ctggctgctg tgtttgtgtc ccacctgcac gcagatcacc 1200
acacgggctt gccaagtatc ttgctgcaga gagaacgcgc cttggcatct ttgggaaagc 1260
cgcttcccc tttgctggtg gttgccccca accagctcaa agcctggctc cagcagtacc 1320
acaaccagt ccaggaggtc ctgcaccaca tcagtatgat tcctgcaaaa tgccttcagg 1380
aaggggctga gatctccagt cctgcagtgg aaagattgat cagttcgctg ttgcgaacat 1440
gtgatttgga agagtttcag acctgtctgg tgcggcactg caagcatgcg tttggctgtg 1500
cgctggtgca cacctctggc tggaagtggt tctattccgg ggacaccatg ccctgcgagg 1560
ctctggtccg gatggggaaa gatgccacc tcctgataca tgaagccacc ctggaagatg 1620
gtttggaaga ggaagcagtg gaaaagacac acagcacaac gtccaagcc atcagcgtgg 1680
ggatgcggat gaacgcggag ttcattatgc tgaaccactt cagccagcgc tatgccaagg 1740
tccccctctt cagccccaac ttcagcgaga aagtgggagt tgcctttgac cacatgaagg 1800

tctgcttttg agactttcca acaatgcccc agctgattcc cccactgaaa gccctgtttg 1860
 ctggcgacat cgaggagatg gaggagcgca gggagaagcg ggagctgcgg caggtgcggg 1920
 cggccctcct gtccagggag ctggcaggcg gcctggagga tggggagcct cagcagaagc 1980
 gggcccacac agaggagcca caggccaaga aggtcagagc ccagtgaaga tctgggagac 2040
 cctgaactca gaaggctgtg tgtctttctgc cccacgcacg caccgtatc tgccctcctt 2100
 gctggtagaa gctgaagagc acggtcccc aggaggcagc tcaggatagg tggtagggag 2160
 ctgtgccgag gcttgggggtc ccacataagc actagtctat agatgcctct taggactggg 2220
 gcctggcaca gctgcggggc aggaggctgc cacacggaag caagcagatg aactaatttc 2280
 atttcaaggc agttttttaa gaagtcattg aaacagacgg cggcaccttt cctctaattc 2340
 agcaaaatga ttccctgcac accagagaca agcagagtaa caggatcagt gggctctaagt 2400
 gtccgagact taacgaaaat agtatttcag ctgcaataaa gattgagttt gc 2452

<210> 449

<211> 2412

<212> DNA

<213> Homo sapiens

<400> 449

atgggggtttt gccatgttgg gcaggctggg ctggaactcc tgacctcaag tgatctgcct 60
 gccacggcct cccaaagtgc tgggattaca ggcatgagcc accgtgcctg gctgaaagac 120
 aaagctttta caactattct taaattatca acttttgata gataatatcc ttgttttctg 180
 tatcttgctt tgatactgct ttcaaggaga taatctcatt aaagcatttt actaaaggcc 240
 agtatagtga atgtaatcac ttttacacag aattgtgtca gcatgacaaa tgtgactact 300
 gagacatcat tctgttaaca ttagaataag tttgtaggtg gtaatggaat atgtggcagt 360
 taacgatcat gagctaggag agtgaacac ttgctgtctt tttcatagct agtcataggt 420
 ccttagcgtg tagtgatctt tattatcttc caagggaag aaaggaaaag gctcgtatgt 480
 tgagaagcat aggaacttga gtcccgcagg tgttcaagtg ggctaggctg gtgtgggttt 540
 tcagatgatc attgagtttt tctcccaaatt ttgtataggc actagcacag taatcctgtg 600

cacttaaadc tggcagcagc tgtcaggggt gatgggctgg tatggggaac ccctcagtc 660
ccagaggagg gtttacacaa tattgcaggg ggctgttgcc ctggggtttt caagatgcac 720
cattttatct cctagtgtct ggctttgaca aacttcctct gtgggggtacc atcctcatct 780
cgggtgggatg tgcagttttc tgtgccctta tcgtctgggt ctttgtatgt cccaggatga 840
agagaaaaat tgaacgagaa ataaagtgt gtccttctga aagcccctta atggaaaaaa 900
agaatagctt gaaagaagac catgaagaaa caaagttgtc tgttggtgat attgaaaaca 960
agcatcctgt ttctgaggta gggcctgccca ctgtgcccct ccaggctgtg gtggaggaga 1020
gaacagtctc attcaaactt ggagattttg aggaagctcc agagagagag aggcttccca 1080
gcgtggactt gaaagaggaa accagcatag atagcaccgt gaatggtgca gtgcagttgc 1140
ctaattgggaa ccttgtccag ttcagtcaag ccgtcagcaa ccaaataaac tccagtggcc 1200
actaccagta tcacaccgtg cataaggatt ccggcctgta caaagagcta ctccataaat 1260
tacatcttgc caaggtggga gattgcatgg gagactccgg tgacaaacc ttaaggcgca 1320
ataatagcta tacttcctat accatggcaa tatgtggcat gcctctggat tcattccgtg 1380
ccaaagaagg tgaacagaag ggcgaagaaa tggagaagct gacatggcct aatgcagact 1440
ccaagaagcg aattcgaatg gacagttaca ccagttactg caatgctgtg tctgaccttc 1500
actcagcatc tgagatagac atgagtgtca aggcagagat gggctctaggt gacagaaaag 1560
gaagtaatgg ctctctagaa gaatggatat accaggataa gcctgaagtc tctctcctct 1620
tccagttcct gcagatcctt acagcctgct ttgggtcatt cgcccatggg ggcaatgacg 1680
taagcaatgc cattgggcct ctggttgctt tatatttggg ttatgacaca ggagatgttt 1740
cttcaaaagt ggcaacacca atatggcttt tgtgctaaat atgaattgtc taaaaattag 1800
ctgtgtaaaa tagcccgggt tccactggct cctgctgagg tcccctttcc ttctgggctg 1860
tgaattcctg tacatatctt tctacttttt gtatcaggct tcaattccat tatgttttaa 1920
tgttgtctct gaagatgact tgtgattttt ttttcttttt tttaaaccat gaagagccgt 1980
ttgacagagc atgctctgcg ttgttggttt caccagcttc tgccctcaca tgcacaggga 2040
tttaacaaca aaaatataac tacaacttcc cttgtagtct cttatataag tagagtcctt 2100
ggtagtctgc cctcctgtca gtagtggcag gatctattgg catattcggg agcttcttag 2160
agggatgagg ttctttgaac acagtgaaaa tttaaattag taactttttt gcaagcagtt 2220
tattgactgt tattgctaag aagaagtaag aaagaaaaag cctgttggca atcttggtta 2280
tttctttaag atttctggca gtgtgggatg gatgaatgaa gtggaatgtg aactttgggc 2340

aagttaaagt ggacagcctt ccatgttcat ttgtctacct cttaactgaa taaaaaagcc 2400
tacagttttt ag 2412

<210> 450

<211> 2081

<212> DNA

<213> Homo sapiens

<400> 450

aatatgatgt tagctgtggg cttatcgta atgaccctta ctgtgttgag gtccattcct 60
tctgtgccta atttattgag agttttta atcatgaaagga tgtttaattt tgttgaatac 120
ctttctccat caattgagat gatcagggtt ggctgtgtgg ctcacgcctg tgggtcccagc 180
actttgggag gctgaggtgg gcagatcaca agatcaggag atggagacca tcctggctag 240
tttttgtatt ttcagtggag atgggtcttc accatgttgg ccaggctgct ctcaaactcc 300
tgacctcaag tctgcctgcc ttcgcctccc aagggtgctgg gattacagac atgagcctgg 360
cctggatgat cttttta atgtgtttgaa tttggtttgc tggctcttgc ttgtcaccca 420
ggctggagtg cagtggcata atcttggttt actgcaggcc ttaaactcct gggctcaagt 480
aatcctcctg tctcagtctt ttaaagtgt ggtattacag gtgtgagcca cattgcacct 540
ggccttattg aggatttttg tatctatgct gatgtagtcc cattgggtcta taattttctt 600
ttctttagt gtccttgtct ggctattgtt cagagcatg ttgttcaatt tctttgtatt 660
tgtgaaattt tccaaaattc tttttattat ttctagtctc ataccattgt ggtcagaaaa 720
gatacttgg atgatttcag tcttctaaag ttatttaaga ctctgtttgt ggcctaacat 780
gtgagttgtc ctcaagaatg ttccatgtgc acttgggaag aatgtatttt ctgctgctgt 840
tggatggaat gttctttatg tctgttagtt tcctttggtc taaagtgtag ttcaagtttg 900
atgtttcctt ttgtattttc tggctttatt gaaagtggac tattgaagtc tcctactatt 960
attattatta tggaaatgga gtcctgcttt gtcaccagg ctggagtgc gtggcaaaat 1020
ctcggctcac tgaaacctc tcctcccggg ttcgagtgt tctcctcct cagcctcctg 1080
agtagctgag attacaggtg ggagccacca tgtccagcta atttttgtat ttttagtggg 1140

gatgtgattt cgccatgttg gccaggctgg tcttgaaccc ttgagttcca gtgatctgcc 1200
 cacgtcagcc tcccagggtg ctgggggttg aggtgtgagc caccacacct ggcctaaagt 1260
 cccctactat tattgtatta taatctctct ctctctagat gtattgatat ttgccttatg 1320
 tatctagaag cttt gatgtt ggatgtattt acagttgtcc cttggtgtgg gattgcttcc 1380
 agtacctctg tgtgtaacaa aagctgcacc attcaagtcc cacagttgcc ctgcgaaacc 1440
 tctgtatatg aaaagttggc cctccatgta catgggtttc ccatcctgtg agtactgtat 1500
 ttttgatcct catttgggtg gaaaaaatct gcatataagt ggacctgtgc agttcaaacc 1560
 cgtgttggtc aagggtcagc tgtatattta cagttgttat attgtcttga taaattgac 1620
 ctctgtcatt atgtaatgat gttctttgtc ttgttttaca gtttttactt agtctgtttt 1680
 aagtatagct acccctgctc tctttggttt ccatttgcct gaaatgtctt tttctagcct 1740
 ttcaccttca ttctatgtgt gttctttaa atgtgaagttaa tcttcatagg ccacatatag 1800
 ttgggtctgt ttttaaattt ttgatagtat ccaacctaat ggggtgtgagg tgataattct 1860
 ttgtggtttt gatttgcatt tctctaata ttagtgatgt tgagcatctt tacatatgat 1920
 tgttggccat ttgtgtccct tctttggaga ctattcaaag tcctttaccc attttaaaaa 1980
 tgaaggcatt tgccctttgt tgttgagttg taggaatttt aaaaatatat tctggatagt 2040
 aaatcctttt cagatataag agtgcaaaaa aaaaaaaaaa g 2081

<210> 451

<211> 3137

<212> DNA

<213> Homo sapiens

<400> 451

attcatgcac tcttccatct ttttgccatt gtgccagctc aatttaa atg tatctgtctt 60
 gtatctgttc aagtggagat aatccatgca aatcaggagc cgtggctctc aatgcctggt 120
 tcacagagag gactcagctt gaggagggtca ctcgttcaca gccgctcctc ccattatatt 180
 tttcccttta ttgcagaact gctgtatgta tacagtgact gaaaggactc aatttactgc 240
 aactgctgcc tggctttact tacaactttt ttttttttat aaaggaactt acctccatct 300

gtcttttcaa gggttacagac cacttactct aaacttcaca aatggttctg aagagtatgg 360
agcctacgta gattcataag ttacaagatc actgtttggc aatacgaggg gatgtgtatc 420
taaaatgaca aactgatacct ggcacttgct acttattaca gagcccaatg tttccaaagg 480
acattaattt tgatttctcc aatgaaggct tgtggctgtc cttatgcttt acaaaacatt 540
accaaatacag agccgaaaag aaaactggta tttatggcac aatgaaaaat ttcattcttc 600
ccagaatgat atgaagatca atgatgcaga ctgatggttt tgatgaagct gggcatttat 660
aactagattc attaaggaat acaaaagaaa tacttaaagg gatcaataat ggtgtcttct 720
ggttgcagaa tgcgaagtct gtggttttatc attgtaatca gcttcttacc aaatacagaa 780
ggtttcagca gagcagcttt accatttggg ctggtgaggc gagaattatc ctgtgaaggct 840
tattctatag atctgcgatg cccgggcagt gatgtcatca tgattgagag cgctaactat 900
ggtcggacgg atgacaagat ttgtgatgct gaccatttc agatggagaa tacagactgc 960
tacctccccg atgccttcaa aattatgact caaagggtgca acaatcgaac acagtgtata 1020
gtagttactg ggtcagatgt gtttcttgat ccatgtcctg gaacatacaa ataccttgaa 1080
gtccaatatg aatgtgtccc ttacagacat tcaactgaaca atgccaggga tacaagtgcc 1140
atggatactc taccgctaaa tggtaatttt aacaacagct actcgtgca caagggtgac 1200
tataatgaca gcgtgcaagt tgtggactgt ggactaagtc tgaatgatac tgcttttgag 1260
aaaatgatca tttcagaatt agtgcacaac aacttacggg gcagcagcaa gactcacaac 1320
ctcgagctca cgctaccagt caaacctgtg attggaggta gcagcagtga agatgatgct 1380
attgtggcag atgcttcac tttaatgcac agcgacaacc cagggtgga gctccatcac 1440
aaagaactcg aggcaccact tttctctcag cggactcact cccttctgta ccaacccag 1500
aagaaagtga agtccgaggg aactgacagc tatgtctccc aactgacagc agaggctgaa 1560
gatcacctac agtccccaa cagagactct ctttatacaa gcatgccccaa tcttagagac 1620
tctccctatc cggagagcag ccctgacatg gaagaagacc tctctccctc caggaggagt 1680
gagaatgagg acatttacta taaaagcatg ccaaactctg gagctggcca tcagcttcag 1740
atgtgtctacc agatcagcag gggcaatagt gatggttata taatcccat taacaaagaa 1800
gggtgtattc cagaaggaga tgtagagaa ggacaaatgc agctggttac aagtctttaa 1860
tcatacagct aaggaattcc aagggccaca tgcgagtatt aataaataaa gacaccattg 1920
gcctgacgca gctccctcaa actctgcttg aagagatgac tcttgacctg tggttctctg 1980
gtgtaaaaaa gatgactgaa ccttgcagtt ctgtgaattt ttataaaaca taaaaaact 2040

ttgtatatac acagagtata ctaaagtga ttatttgtta caaagaaaag agatgccagc 2100
caggatatttt aagattctgc tgctgttttag agaaattgtg aaacaagcaa aacaaaactt 2160
tccagccatt ttactgcagc agtctgtgaa ctaaatttgt aaatatggct gcaccatttt 2220
tgtaggcctg cattgtatta tatacaagac gtaggcttta aaatcctgtg ggacaaattt 2280
actgtacctt actattcctg acaagacttg gaaaagcagg agagatattc tgcattcagtt 2340
tgcagttcac tgcaaacttt ttacattaag gcaaagattg aaaacatgct taaccactag 2400
caatcaagcc acaggcctta tttcatatgt ttcctcaact gtacaatgaa ctattctcat 2460
gaaaaatggc taaagaaatt atatttttgt ctattgctag ggtaaaataa atacatttgt 2520
gtccaactga aatataattg tcattaaaaat aattttaaag agtgaagaaa atatttgtga 2580
aagctcttgg ttgcacatgt tatgaaatgt tttttcttac actttgtcat ggtaagttct 2640
actcattttc acttcttttc cactgtatac agtgttctgc tttgacaaag ttagtcttta 2700
ttacttacat ttaaatttct tattgccaaa aggacgtgtt ttatggggag aaacaaactc 2760
tttgaagcca gttatgtcat gccttgcaca aaagtgatga aatctagaaa agatttgtgtg 2820
tcaccctgt ttattcttga acagagggca aagagggcac tgggcacttc tcacaaactt 2880
tctagtgaac aaaaggtgcc tattcttttt taaaaaata aaataaaaca taaatattac 2940
tcttccatat tccttctgcc tatatttagt aattaattta ttttatgata aagttctaata 3000
gaaatgtaaa ttgtttcagc aaaattctgc ttttttttca tccctttgtg taaacctgtt 3060
aataatgagc ccatcactaa tatccagtgt aaagttaaac acggtttgac agtaaataaa 3120
tgtgaatttt ttcaagt 3137

<210> 452

<211> 2468

<212> DNA

<213> Homo sapiens

<400> 452

aggaaatgga actgaagaac tctgtctttt gacatcagga aaacttagct attctctatc 60
atggagctta gatgaaaatg gtcttctctt gataacctatg ccacaatcat taagatcttc 120

ttactgcagt atgttaagga atgtagatgc aagaagtgtt cctggaattc catggctcat 180
gaatgaacag aagctttttg aatgggcaaa tgaagtcaga attgatccaa ataatccaga 240
atattctgat ttaatggaat ctgttacgta catgagactt aaggggcagg atattccaaa 300
gtattttcgt cttgaacagt tgcaagatga atttaacttc gtttctgaag aggaaatggc 360
aaagagtaaa cgtttccagc tattgcaact tagaaatgca ggtcaattag ataatttcct 420
tctacagcaa atgcccctcc atgatacaga gattccagat ttagtcttcc agccagggtgc 480
agtgactcat gcctgtaatc tcggcactct ggggagctga ggcagaagga tagtttgagt 540
ccaggagttt gagaccaacc tgggcgaaat ggagtatgaa agtcagaaag agaaggaggt 600
atccgtttca gatgtaaatt ctattacagc acaaaggatt aattctgcca attttctgaa 660
aaagggtgaga aggttgataa tgaagagaat tgttaaaatt agcaaattgta acttgtcaga 720
tattgtgaat gattatgaag aaattgtatc tacaagccaa ttgacagatg cagtttgtaa 780
gtttgttgaa ccacggagaa agttaaacc tcagaggaaa gaaaggaaaa aagtcacagc 840
gcaggcgatc tctgacggag atattaagat tcttgtccga atagtgaggg cctataatat 900
tcctaccaga aaaacaacaa ttaatggctt ctgctgccaa ctgccctatt ccatgccact 960
gactctctca gtactggaag cagaaagggtg gagaaaatgc cccaggaaaag ctgcgaagca 1020
aatgtggaat gatccttgga tatgcctact tgtttgaaat catctataatc ttgcctcaga 1080
catagagaaa caatcaaatc agtagcctca gatgagacct tacatgagga tactgtacat 1140
ccattcgtgg aagtttcttt ccagcacact gtatacaaaa ccaatacagc aagtggatct 1200
catccatgct ggaatgaaga aattaaagta gattttgtct caccaggaca tgattatagc 1260
ttctcaagct tatctaaaat aaaagataac atatatatca acatttttga tgaaatgatg 1320
actgaaaaac atgaggatca ctgtctcaag agctgtagtg gtcactcata tataagaaag 1380
aattggcttg gatgcattgt cttccctttt tctgctcttc tgcaacaatc tgaggatcga 1440
aaggactctg aagagtaaag tgatggaatg gcgacctaaa cacccaacac attggaatcg 1500
acagtgtact tttattttgc gacaaatcct tcctaagctg gaatttggca taggaagctt 1560
tgtttcatct gaaggagata atgaatttga aagaatacta caattttatt gggtcacggg 1620
atttcccatc cagatgccat acattgatgt acagtcaatt attgatgctg tttatcaaac 1680
tggaattcac tctgctgaat ttccccagac agaatttgct ttagctgtat acattcaccc 1740
atacccaaac aacatattat ctgtgtgggt ctatttggct tccttagttc aacatcaatg 1800
aaaaggaagc agagcaaagt aaaagattgt actatagtcc tctagtagca acaaaaactt 1860

ttctggtacc ttgagatfff gctgtttatt ctcaagtcca gctaagtgt gggcccaatt 1920
 tttgattcac ttacagagct gggcactatg gagactcgca cccctgagtg agtctttgag 1980
 gaggagtcta gatgagcttc tcaccagaga cctctccagg aaggaccttt ggatagtctg 2040
 gctttcttgg gtcactgtct gcagtaggtc ttattctggg aaagaagcaa ttttggcctc 2100
 ttctcctaag accaatgttt ctcaaattgt agaattcaca ccacctccat ttgaatcatc 2160
 tggagagcct tgttgaaaat gcagattact agatcctcct caagaccac tgaatcagca 2220
 cctctgggag tgaagctaca gactctgcat tattttcaac aagctcccca gataattctg 2280
 atgcactgtt atgagggaga gcccagcctt atagaatgtt gtcactacta aactaaggct 2340
 ggtacgtttg atgctgggtc tgatacaatt tcagatggaa gctgctcgag tggaaaacta 2400
 aggtcattgc ctctcatgga taaaatgtta tttcactggt aaagaaaaat aaaataaaat 2460
 ctaccatg 2468

<210> 453

<211> 2515

<212> DNA

<213> Homo sapiens

<400> 453

ataataaacg gatggtttta cccccaagaa cccttcttct cattgactga tgtgtttgca 60
 gagagctcag aactgctctc acaggctgta aaaagctata aaaatgtaaa ctatcattga 120
 catcatctgc aagaggaatt tctcactatg acattcctct tctcacgatg gggattcatg 180
 tcagcctgtg cttggtaggg gaagaggcca ggggagtgtg aaatatgagg atgcaggatc 240
 aggcgggctc tgatttgcaa gcagccgagg cagatgccaa tgatcatgca gagaaggagt 300
 ttattgaaga atgctgagag ctctacagc tgtgatgagg tgggtgagcc aagcccactt 360
 ccaggaacgg tgtcccaaatt caccacacag gacagtgggc ctgatgggaa accggcagca 420
 ttgcagccac cgaacgggga aggcacccat catatgggga tgctcccaca gcacagagag 480
 gtgcccata tatggagatg ctcccactgc acagatactc ccattgcaca gatactccca 540
 cagcacagag aggtgcccac catatgggga tgctcccact gcacagatac tcccattgca 600

cagatactcc caccgcacag agaggcaccc atgatatggg gatgctccca ctgcacagat 660
gctcccacgg cacagaaagg caccatcat atggggatgt tcccactgca cagatactcc 720
cattgcacag atactccac cgcacagaga ggcacccatc atatggggat gctccactg 780
cacagatgct cccacggcac agagaggcac ccatcatatg gggatgctcc cactgcacag 840
atactcccat tgcacagata ctcccaccgc acagagaggc acccatcata tggggatgct 900
cccactgcac agatgctccc acggcacaga gaggcaccca tcatatgggg atgatccac 960
tgcacagata ctcccattgc acagatgctc ccaccacaca gagaggcgcc catcatatgg 1020
ggatgctccc actgcacaga tactcccatt gcacagatgc tcccaccgca cagagaggca 1080
cccatgatat ggggatgctc ccatgcaca gatgctccca ccacacagag aggcgccctt 1140
catatgggga tgatccact gcacagatgc tcccactgca cagatgatct cattgcacag 1200
atgctccac tgacagagag gcacccatca tatggggatg ctcccactgc acagatgctc 1260
ccacggcaca gagaggcgcc catcatatgg ggatgctccc actgcacaga tactcccgtt 1320
gcacagatgc tcccaccgca cagagaggcg cccatcatat ggggatgatc ccatgcaca 1380
gatactcca ccatgcagag aggctcccat gatatgggga tgctccact gcacaaatgt 1440
tcccactgca cagatactct caccacacag agaggcgccc atcatatggg gatgatcca 1500
cggcacagat gatccattg cacagatgct accactgcac agagaggcac ccatcatgtg 1560
gggatactct tgctgcacag atgctccca cacacagaga tgccccagtt acgctggacc 1620
aaacccaact gccaccagcg ccaataccca ttgtgttcca ggcacttcac tttgtagcca 1680
ctgtgtcctc cctcaccacc caagctgggc atcgctgggt gatgaattct agggcagcct 1740
cctctctcag ggtggacatc acaatggtgc agtctgtcac tgtctgggtcc ctggtggcaa 1800
agggaccggg taaaccgtt gtcaggccac cttggggctg tgagatgtct gtaaggtegg 1860
tagtgccagt atggtaaagg catttgaggg gtgggcaggt cggatgcaca gatcagcgtc 1920
caccctgctg tcaaccaggg cagcaggagc atggccacct cagctgcaaa tcaggagggt 1980
ttccattatt ggacccaaag atcgagaaa acccagtgga ggcagtttgc aggcgggtact 2040
aaccacacaa tgcatttgct ctgacacagg accagggcac gtagtagacg ggcaggggtc 2100
agggaacctg cctgggggtt tgggccaggc tacataggga taaagcaagc cccttaaccg 2160
actggatccc aggatcctgg ccataaagg gagagggttg gaagaagatc ttccacatcc 2220
cttttgccct aacctggcag catacacca aactgggggg tagtgttggc tttgtggttt 2280
taataagggtt aaaagcaggc caagtcttag ctcaagaagc tggcaggctg agttaattcc 2340

ggagaaaaca aacgggaagc ccaagacctt ggacatagat cttttattcc ctcctccttg 2400
aaattctcca tccccaagcg cttattaatg tggaatttgc tgcttggggg agaaccaact 2460
ctccgacttc agaaacattt gtaagagcaa atttaataaa gctaagaata atacc 2515

<210> 454

<211> 3087

<212> DNA

<213> Homo sapiens

<400> 454

gtatTTTTtag tagagacggg gtttcaccat gttgggcagg ctggtctgaa ctcctgacct 60
caagtgattc gtcagcctca gcctcccaaa gtcccgggat tacaggcgtg agccactgtg 120
ccccaccta tccccatttt tcaaatgaga tgactgaggt tcaaagtagt tcagtacctg 180
ccccaaagcc acaaagcctg tgctactctg cccccaagaa ttagtgattt ccaggctgtg 240
cctggctctg ctagctagca gctgtgtgac cttggcaagt ccgtttgcct ctctgagcct 300
atctacctcc tctgtataat ggggtctggta gtcttcacct acctcaccag ctgctgtgga 360
gctccgacga gatggtgact gtgaaagcac ttgacaaact gaaggcactg gacatgcctt 420
gtggtcagtg tggcctcaac ccagatgtcc agtgatttcc agggcacagg ggctttgagt 480
gggatggcca aagaagacac ctccatccaa ctgggagcca cccctgggtc acaaacactc 540
cattgcttgg tccctcgag tagctcgagg tcagaagttg actgcagctt gattcacagc 600
ccctcgctca gagcaggag gtgggactgg cagcacagca aagacatcg tccttggggg 660
cctccctgtt gcatatttca attaaggcag gtttacagcc cccagcgtc tgtccggagg 720
gggcctgagc agcaggcctg gcagcaccca ctgctcctgc ctgaagaggt gctatccagc 780
cccggctgtg gacatacagt gagattgtac aggccgggtct ggagcagctg caggggatat 840
gatctggata agactgagca gaccaggag gctctgcaat gtagagctta ttctcaagc 900
tcatggtgag attggagccc taaagagtta gccagggtgc agccaccagt gtggaaatcc 960
agggatggcg caggccatgg ccagctcttc ccagctcacg tctgagaacc aagggtctga 1020
gcctctctat cagccccagg aaatcctcag ccatttgggtg ctgatcagcg atagggtctt 1080

ggttcacagg atgagtgcc gggctcctct ggggagaggg gccagctgca ttccgcccc 1140
ccctgagagt gagaaggggg cagtccccga ccaggaatgg gcctacctgg tgctaagaat 1200
ggacataaca gttctccctc tgaggcttgc atttcatctg tcatggcaag agcactttca 1260
ggctcacagt ttctcatctt ttcaacagtc agggaaaaga aacctatgga atagttcgca 1320
tttcacagag gaagaaactg agggccagag ctaggggtct ctgacacagc catgggatcc 1380
tgcacccac actggctcta tgtgactctg tagtagtggc taatgtccat cagtgcgcc 1440
ctgctccct gcctggccat ttgccccaa atagggcagt ggtgggagta taccctggag 1500
gagggggaag tgggatata gtagtacttg gctgacttca caattttgct acaccagtc 1560
tggacctcct gacagtggag tgggatccct gtggcttct tttcttgtt tttgtttgt 1620
tttgttttt ttagatggag tctccctcta tcatccaggc tggagtgcaa tgggtgcgatt 1680
tcagctcact gcaacttcca cctcccaggt tcaaacaatt ctctgtctc agccacctga 1740
gtagcttga ctacaggcac ccgccaccac ccagctact aagttttgta ttttagtag 1800
agatggggtt tcaccacatg gccaggatgg tcttgatctc ttgacctgt gatctgcca 1860
ccttggcctc gcaaagcact ggggttacag gcgtgggcca ctacgcctgg ccaattttt 1920
tttgtttgt tttttgaga tggagtcttg ctccatctcc caggctggag agcaatggcg 1980
tgatctcagc tactgcaac ctctgcctcc tgggttcaag cgattctct gcctcagcct 2040
cccaagtagc tgggattaca ggcaccacc atcatgccc gggttaatttt tgtattttct 2100
tagagatggg gtttcaact gttggccagc ctcatctttg aactcctgac ctccgatgat 2160
ccacctgcct tggcctcca aagtgatggg attacaggcg tgagccaccg cacctggccc 2220
cagtggcttc ttcagacttg aaacacaaaa tgtggccagc tagggataga gagaattctg 2280
actttcaaca ctgctgagc atggcatggg ctgcttctgg gtagtgagct ccctgtcctt 2340
gggtagaca cagccatccc ttgggtcctt cctccagacc ttccaggtac agccctttgc 2400
tgctcttccc tgcctcaaa cctttgccag tttttgagtt tctttacca ggatgttcca 2460
tcagatctct ctgcttccgg gaagtcctat tccactgacc acctactgtg tgcacaggct 2520
tgtgctgagt ggtgctgtgg aggggcagaa gggagctgga acctggtgat ggagagaagt 2580
cacagcatga tgaataactc atgtccactg ggcacgtgct aggcactggg cattgttcta 2640
agtgtatgtc ttatctcatt tactcctcac agcacgtatg agataagcaa tcttacttat 2700
gtctaagtag cttccagatg aggaaactga ggctctggga agtgaagtaa cttgcctaag 2760
gaaacacagg atgggctatg gaaccaggat tcaaccacaa acacagtgc ttagcatcat 2820

ctactgcaaa catccactgc agttaaaatg cctggagtgg gtggcctggt cactggaggt 2880
 gagggtcggg gctgggtcgt ctgagagcca ggcgggtcctt cgggggtgagg ggagtgttgg 2940
 ggtgaggaaa catgtgaaca tgcctcagtc tttggagaac ttagttactg ttaacctgaa 3000
 tgtcaccacc cctgactcgg agactggcac caaatggatt atgggttcaa taaatgtttg 3060
 ttgaatgaat aaacgagccc catttgc 3087

<210> 455

<211> 2783

<212> DNA

<213> Homo sapiens

<400> 455

gctgctgccg gctgcgccat ccagcaccca gactccagca ccggccgagg acccccactc 60
 cggctgcagg gaccctgtcc cagcgagacc gcaggcatgt catccgaaaa gtcaggtaaa 120
 aacaataaca aaacctccca cccctccac tgtctccaga ctctccgtcc cccttgcccc 180
 aacccccctc cttacccttc ctcagctgtg gttctatttc attccccctc tctccagctc 240
 tcaacactcc ccagtcctcc ctctcttttc tgtctcccc tttctcttcc tttctctttt 300
 ccagtggcag cctctgcccc ttgccaacaa catggtcagg ggggtaggtt gagagggtga 360
 aggaggtaca gccaggtttt gcagggatgg catcattggg agtgacagat ggacaatcac 420
 tggctggcat ggagacatcc tgtgaggaaa tatggagaca tgaccagatg ggggttgtca 480
 agggagcaaa atccagaggg ctcttcttaa tctgccctaa aagaggtccc gagattctca 540
 cagaggctgg ggcactctc cccccactga aggaacagca gagtggaaca catgtaatcc 600
 cacatgtgtt tatacaactg ttgaattgag cacatattaa cacagggttg catgtctacg 660
 catacgaca cacaggacta gctcggatag gccagcccaa aggcagctat agcaaaggag 720
 aggggattag gtctgcaggt gagagctggg tgcattgtga tgaaaaagac agaaaagaag 780
 cagaccagag ttgtgacctc aaaactagat tggaaggaag aaggaggggg gcagatggcc 840
 tagatacagc ccctctcttg cccctcaaat tagagatggg ttctcaccg tctctctcta 900
 tgtgtctctc ccattatctt tctccatccc tgaccggctg tgtttccct taccctctcc 960

tcaactcatc actgtgtcat ctttcctctt atactctcct ccactcacct cccccaggac 1020
tcccagactc agtccctcac acttctccgc cgccctacaa tgcccctcag cctccagccg 1080
aacccccagc cccaccgcca caggcagccc cttcctcaca ccatcaccac caccaccact 1140
accatcagtc tggcaccgcc accctcccgc gcttaggggc agggggcctg gcctcttccg 1200
cggccaccgc tcagcgcggt ccctcctcct ctgccacgct gccgaggccc ccccaccacg 1260
ccctcccgg ccctgctgcc ggggcacccc caccggctg cgctacctg ccccgcatgc 1320
caccgaccc ttacctgcag gagactcgct tcgaggggcc acttcccccg ccgcccggcg 1380
ctgccggcgc cccgcccccg ccggcgccag cccagactgc ccaggcccct ggcttcgtgg 1440
tgcccacgca cgcggggact gtgggcacgc tgccgtggg gggctacgta gcgcccggat 1500
accccctgca gctgcagcct tgcactgctt acgtgccggt ctaccgggtg ggcacgccat 1560
atgcaggcgg gaccccgggg ggaacaggag tgacctccac tctcccccg ccgcccagg 1620
gcccagggtt ggccctactg gagccgaggc gcccgccaca cgactacatg cccatcgcg 1680
tgctgaccac catctgttgc ttctggccta ctggcatcat tgccatctt aaggccgtgc 1740
aggtgcgcac ggccttggcc cgcggagaca tgggtgtcggc cgagatcgct tcacgcgagg 1800
cccggaactt ctcttcate tccctggccg tgggcatcgc ggccatggtg ctctgtacca 1860
tcctcaccgt agtcatcatc atcgccgcgc agcaccacga gaactactgg gatccctaaa 1920
aacgcccctg gtccggcccc actctgcgcc cctcgatctc ccaggctctt tctgcagtca 1980
taccgaggac ccaatgggcg ccctgcacac ccgtttctgg ggccgtcaga cttggataca 2040
tcgtaaaactc cgcctccacg gaacgtctcg ccttgcgagc aagctcggaa tccagttcct 2100
caggaacccc tccaaaaccc acacccccag ggacgccgct ttccgggatc ccggccaaac 2160
gccggaccct cagtcgctcc aggccccctc accctcaaag tgtagcggcc ccaaccgagc 2220
aacctcggtt tggtccttaa aaccccgctt cctctataag caccgcccc a gctctgacaa 2280
aaccccgctt ccaggtcggc aggtctccgc ttcttttctt ctccgcgggg tgattcagtc 2340
cagtgattgg gtttgtggct ccaggcctcg cccacagacg gacagacccc tccctttctt 2400
ccggcaaaaag gaccgagccc tggggtagta aggccccac actcctgttt ttgcaagta 2460
catttttgtc cctcctccac ccaggatatc gcctatttt ttgctaatac cagaaccttt 2520
ccttttgcct tttttaagga catttgggaa gttcctggtg taggacctt ctccctggga 2580
taagaaacct gcctgtaaac gctctgtaaa tactccctt caccatccc agcccctggg 2640
cagccgggca gaagggaatc caggctatgg acctcccaag tccccgctcc ccgctccct 2700

cggcggcccc gccttgttct gatctgtgtg tgagtgtgtg tgaacttctg aaagacaata 2760
 ttaaagagac ttagttgatt tat 2783

<210> 456

<211> 2237

<212> DNA

<213> Homo sapiens

<400> 456

ggccttttaa gggcattcca tgagcaggta ccacacccca ggtgaccact tgaggccact 60
 ggtggaaaag cagcatgccc tggggttcat tttcagcctg gtcgcgggcg gcctcctgtg 120
 tgcccctttc cctgatggtc tgggtgccctc ggctccctcc ccacctcctg cccactgctt 180
 ctcagtgtga tgtgggtgca gtgggtctga aatgcggcct cctctgtccc tttcctctgc 240
 cggctcggcc acccacctgc ccacctgcct catcctccca ggtgaggagc tcatctacct 300
 ggacccccac accacgcagc cagccgtgga gcccactgat ggctgcttca tcccggacga 360
 gagcttccac tgccagcacc cgccgtgccg catgagcatc gcggagcttg acccgctcat 420
 cgctgtgggg tttttctgta agactgaaga tgacttcaat gattggtgcc agcaagtcaa 480
 aaagctgtct ctgcttggag gtgccctgcc catgtttgag ctggtggagc tgcagccttc 540
 acatctggcc tgccccgacg tcctgaacct gtccctagat tcttctgatg tagagcgact 600
 ggaaagattc ttcgactcag aagatgaaga ctttgaaatc ctgtcccttt gaaaatcctg 660
 gggtcggggg tggcacctgt gagagcctgg ggctcctggt gccgctgcgt ttcattccatc 720
 ccgcccgtc gcctgccgag ggctgcgccc cgtgctgcct cccccagag ggccaccgcg 780
 tgtgctcgtg gactgaggct gcgctgcccg ggaggccctta ctgcttggtg tcagactgcc 840
 cagctcagag tgcccgtcag ggctgtgca tccgcacgcg gagccgtctg ttaggagctt 900
 ccagagtgtt ctctcgacac tgccagcccc gtgttagcac ctgggcctca gtcccacttg 960
 ctcccaggcg ccggttctgt ggttggtttg gaattaaagt cctgtttgaa gttgtcagac 1020
 acagacatga atttctgggc gtcacctgag tcagagtctc agaagacctg tgcaggctgg 1080
 cgtgagagga gcggcagcca cactgcggcc ccacgcccga ggactgggct gctctcgagg 1140

ggggcgcgcc caccgctgtg tcctctctgc ccagcctggc ttaccaaggg ctacctcagt 1200
 ggggatgag gttggaggaa cgaaggcgag gticctcctt gctttgggga gaaaagtatt 1260
 caggaagtgg gtgtgtggga aacctgaaga tggcgtgcac aggacacagc gtgggcggcc 1320
 tgggcagaag ggcggctggc tgtcctggag ctgtgctgg agcctgccct cagagtgtcc 1380
 ctttccagcg ctgtggcatt ctgtggcagc ttccccaggt gtggtgacgg ggggggggcg 1440
 gggcctccac ctgtgacagc caggcttgag ggtggacggc gtgcctctcc caggagcctt 1500
 ccccatgtcc ttgccttgct gagaattgcc ctcccatgcc gctgaggtgt taggtggttt 1560
 agggccaaaa ggggaaaacc acttgagtct tgtggtgtgt ggtgggcaga caccacaggg 1620
 tggcatcacc tgggtggcatt tccagaacct cagccccgat tccagcacc accaccgcct 1680
 gaccctgtgt aacctgtgt cccgggtccc agagtgcact ctgccccgct gctctgtgc 1740
 ctgtcctggg aaagtatctt tgccccacta ggaaatgtaa acaggagggc ttggggagcg 1800
 tgggcacttt tctcatgagc agctactgcg gcgttggcag gactcgtgc tgctgctgct 1860
 gcttgtgtag gtcggggagc cagagatccc cgaggacgcg cgccggacag tcggcactga 1920
 ccggcccacc tggtagcaga ggacaccccc agcccccaa gcattgaaga catagtgtat 1980
 ttctcgtat cttttctccc ttgggtgtag ttgggggtggg gaagcaggga aggctggtgc 2040
 gatctccatt cttgggctc cacgtccgag ttcatggtgc gccgctgtgc tgggagctgc 2100
 agtggtaatg tgtgggacac cttgacaaa ggggagcttt gtctcgtgtg ttttgaaaaa 2160
 ggcttaatga agagaatgtt gttcattctt agtagtatag tttgcaattc ttaatggcaa 2220
 ataataagtt tcagtag 2237

<210> 457

<211> 2554

<212> DNA

<213> Homo sapiens

<400> 457

gcagggattg gggatcccgg tgctgggagt tggcccaggt gggagggact ggcccagagc 60
 ggtgccaggc acaggtgtga gtaagggtcc tgggggaggc ggggtggtag tggtggcagg 120

ggccacagc gccagggtg ggcctccttc cagaccacct cttccactct tggcagcatg 180
gcgatggccc gtggcagcat cgagctcggt gttgaaactt gtggaggtca ttcacctca 240
aaggctgagc tcacacaggc tgtgcctgcc ccggcccggc cccggcccct ctccccggc 300
ctccccactg ggcagcacc cagcagctgt gtccctccgc ccacttcctt ggctcacctt 360
agcgtcgtcc cccaggaagg gcctcagtgt ggctggcggg tcccctctgc gggccgtgga 420
gggcagtga ggcaccaggc ctctgtggga gagcgtgggc catgggtcgg gggtcctctt 480
gccgccccac cctcccttac tgaggctcgg aggggaagcc gctggaggac ctgcacctgg 540
taccctcac agcgagacgg gctgctttcc gggggagctg aggggttctc cagagcaggc 600
agctgtgggg tgtggggttc ccgttggcct cccacccca aaaccacct gcagggccag 660
agatgccagt gtctggcaat tctgcaactt aggggtggctg agctgggtgg gggacggacc 720
tcttggggcg aggggagagt gtccacagag catccccagc gtggtccacg ctagtcccc 780
agggagccgc cagcctcatc ctctgtccac ccagaccgcc ctggtgacgt ggctggtttc 840
cctcctgcct tcctggcacc tcattgggga cgtctgtgt gaaaactaag agagagctcc 900
accctctgt gccctcctcc tgtcctgagt cgggggtgggg ggggctggcc ttggagggga 960
cgtcccctcc tcaggctcgg agagatttgt ctccgtaact ggggacttta aatatgcct 1020
ctttcacttt gacttaattt ttgcatgacc cttggagaaa ggaaaaagtc aaggcctcgg 1080
ttcagagcat cataaagcac agcagccccg agacatccca gagcctcatg ggcccagcct 1140
ttctccctca cagcgggggc ggggcaacag ccgcctcctc ctggccaagc tcgccaggag 1200
ctggaggagc tggagaaagc atcctgtctt ccctttttcc tgtcgggtgc cagagaaaca 1260
tttgctcggg ggccacatgg aagcaaagaa ctcagaagct ttgcttagag agtaaaaatg 1320
tccaaactgc atgtaaaaaa aagttaaatg tcatttagaa tcagaggaaa atctgatgcc 1380
gagaagtgt gcatggttat tttaaaaact agaagataca gaaaagatta atgaagaaaa 1440
tagactagcc ggcatccac agtctgattc tgtattataa ttggaaatgt cactcctcac 1500
tgtggaaatc gaggaagcct caggataagg aagggggcag gagaggacag gcgtctgaag 1560
acatggacgt gggcccatcc ctgccacggt cctgaggctg cagggggccc acagccctct 1620
gtgggctccg tttccctgtc cggaacagg gttaggacta actggaattc cctctctgt 1680
aagcattctc caaccaagg gctcacatcc acgattgtga ccccttaagg gagggaagag 1740
gctggggtga tgggaggagc ccaggacggc ctgggggcag ggagctggga ccaagcactc 1800
gggggcgggc accacaggtc acgccttcgc ccacccccc cccggctga tggatcctct 1860

gaccctgcgt cctgtcccga aacgcacctc tcccttggaa gctatcccca gagagagcag 1920
 gagccactgt ggcccatgg ttcggagcca ccacagcaaa gtgaattaag ggaggtggct 1980
 cagacctcgg ctagaagcct cgggtggcact cgggagggac ttcacaaacc aggatgcgga 2040
 cggggaaagc gccagggttt ttcctgtaga tgtggggcgg gctctgggag tcagttaagg 2100
 aacacagaat tcaggaaggc agtgagccct gggctgaggc agtccccgca caggcagcca 2160
 caccacccgg ggcttccaga ggggcagctc cagtacaggc agcggcacca cccggggctt 2220
 ccagcgggtc catgtggaga gtccctcgaa caaagccctc tggccggcac ctggcggggc 2280
 tgagcacacg ctaggcctca gtcactctca ttggctgtgt catcctgtaa acaaagattt 2340
 ctcctaacag gctctcaaaa tcaacctgca ggatttcccc ttagaatcta agtgagatct 2400
 cttgcttcaa ataagcctta aagttctccc tccagggtg ggcgcagtgg ctactcctg 2460
 taatcccagc actttgggag gctgaggcaa gtgggttgct cgaactcagg agtttgatac 2520
 cagcctgggc aacatggtga aacccgtct ctac 2554

<210> 458

<211> 3310

<212> DNA

<213> Homo sapiens

<400> 458

agtgtcaatg cggcgctccc gctgaaggag ggaaacgcgg cgcgtccagt aggggagact 60
 gcattgctga gtcctggccc tctgagggga cgactgtgcc tgagtgtgc tgtgccactg 120
 ggacccgcct ctgcatgaa agccatgccc tggaactgga cctgccttct ctcccacctc 180
 ctcatggtgg gcatgggctc ctccactttg ctcacccggc agccagcccc gctgtcccag 240
 aagcagcggc catttgtcac attccagga gagcccgcg agggtttcaa tcacctggtg 300
 gtggatgaga ggacaggaca catttacttg ggggccgtca atcggattta caagctctcc 360
 agcgacctga aggtcttggt gacgcatgag acagggccgg acgaggacaa cccaagtgt 420
 taccacccc gcatcgcca gacctgcaat gagcccctga ccaccacaa caatgtcaac 480
 aagatgctcc tcatagacta caaggagaac aggctgattg cctgtgggag cctgtaccaa 540

ggcatctgca agctgctgag gctggaggac ctcttcaagc tgggggagcc ttatcataag 600
aaggagcact atctgtcagg tgtcaacgag agcggctcag tctttggagt gatcgtctcc 660
tacagcaacc tggatgacaa gctgttcatt gccacggcag tggatgggaa gcccagagtat 720
tttcccacca tctccagccg gaaactgacc aagaactctg aggcggtatgg catgttcgcg 780
tacgtcttcc atgatgagtt cgtggcctcg atgattaaga tcccttcgga caccttcacc 840
atcatccctg actttgatat ctactatgtc tatggtttta gcagtggcaa ctttgtctac 900
tttttgaccc tccaacctga gatggtgtct ccaccaggct ccaccaccaa ggagcaggtg 960
tatacatcca agctcgtgag gctttgcaag gaggacacag ccttcaactc ctatgtagag 1020
gtgcccattg gctgtgagcg cagtggggtg gagtaccgcc tgctgcaggc tgcctacctg 1080
tccaaagcgg gggccgtgct tggcaggacc cttggagtcc atccagatga tgacctgctc 1140
ttcaccgtct tctccaaggg ccagaagcgg aaaatgaaat ccctggatga gtcggccctg 1200
tgcatcttca tcttgaagca gataaatgac cgcattaagg agcggctgca gtcttgttac 1260
cggggcgagg gcacgctgga cctggcctgg ctcaagggtga aggacatccc ctgcagcagt 1320
gcgctcttaa ccattgacga taacttctgt ggcctggaca tgaatgctcc cctgggagtg 1380
tccgacatgg tgcgtggaat tcccgtcttc acggaggaca gggaccgcat gacgtctgtc 1440
atcgcatatg tctacaagaa ccactctctg gcctttgtgg gcacaaaag tggcaagctg 1500
aagaagggtc ctggtaccag cctctgccct acccttgagc tacagacggg accccgatcc 1560
cacagagcaa cagtactct ggaactcctg ttctccagct gttcatcaaa ctgagaaaaa 1620
cttcagagct gtgtaggctt atttagtgtg ttgtcagcct tggatattgg aaaatggaaa 1680
cagatgagac acatctacct ccctgtgacc ccagccatac atcatagctc atgtcctgcc 1740
acccaagtc cttagggaag aaagactttg gagaatgtgt ctctgcttag cttggctagg 1800
tagttggtct cttttctctg cccaagcgt cccctgggta attttgaca atggagtgtg 1860
ggcatgtttg actcttgtgg tgttatcact tgtatatgtc agtgaaacta actgattctc 1920
ccatcggaat atagttatct cttgggcctg atatatggta ggataacctt atgctcatct 1980
gtccacttct gcagccaagt cgcctggcca gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 2040
gtgtgtgtgt gtatgcttat ctgtgtttta aggtgtgtgt gcatacacag ggcagagagg 2100
atggagccca ccgtactgca gcatcatgta attaactcag tgctcagaac catcccagcc 2160
tctgcgggaa agagaaaagg aagccaacag tgcctgatga gctgatcata tgtgcaaaag 2220
ctctgttggc atctggtcca ggagagcacc caaaaaaagt taattggtgt tgtccagtct 2280

cctttcctta agactatggt tacaacaaag cgtgagcagt gtctcctgca tggccactat 2340
ccagcgcaat tccataattc ccccatagag ccggtgggga ggaggaggtg agtggcgaag 2400
gaagtggaaa cacttggtgt catgtgctcc tatcatttct actagcttac tgggaaataa 2460
agtgtagtca agagtgtatg aaggcaagat gtaaaattag cgactgggtgc taatctgggtt 2520
acttgaaaac aagtgaaagt gctgtagatt tgttctgttg ctaagaacca ccacactaaa 2580
cctcgtatag ttcctggagg atacacaaca gtgtaattct ctttaggggtg tgccacaggt 2640
tcctggcctg tgggagggaa tgaatcagga gggctcttga gaaccttcat ctgtgtgctt 2700
gcactgaaag tgagtcccaa agctggagat ttagtgagag cgggcaaccc ctctgtgtct 2760
caccgtccat attctggagg cagaggtttg taacaggcca tgtgcacctg catagggatg 2820
ggtaaagcaa ggactttgaa agagttgaaa agcattataa acagttgttc agaaatacgt 2880
cccaggagtt ccatgtgaaa ctggctctgt gtgcattgaa gcatggctgt tgggaattct 2940
aactgggtcca acactcctgc aaaacaatgt gtaaataattt aggaagaaac ttgaaaatag 3000
tcaaatacctt tgaactggtg acaatttttt aaagaatcaa ttctaatttg tttcaagggt 3060
aataatcacc aagatacaca tttcagcatt tatttagtct atcaaaaatt ggaattgata 3120
tatacactca tttataggag aatggtagg tagatttggt atatttatgt agtcattgaa 3180
aacttagttt ataaaggcca atcttgtaac tgattcttgt gtgataacat tcagtgaaaa 3240
agcatgagac aattagaaag catgatacaa tgaataaaat aaaaactgga aagagaacca 3300
tcaaaatgct 3310

<210> 459

<211> 4064

<212> DNA

<213> Homo sapiens

<400> 459

acactaactt gtctgatgct gtctgccaat gtcacacctca ccacttgtgt cttacagaga 60
aggaaatggg agaggagggt tgtgtcttac agagaaggaa atgagagagg gaggttggt 120
gcaacatcag agtgacagtt ggctgtctct catttcttgg ggcatcagct ctgatttggt 180

tagagcctgg gatcatccca gttcctggaa gaatctttgg aaaaggggtcc cttgtttctt 240
gggacatgtg tcatgggtcac taagccccct ttccttcagg ctactgttgc tcagggacac 300
aatgagatac cccaaggaca tctagacctg acttttcatg aactctcttg cctctgtggt 360
ccccacattg gagacctccc tccctcctcc ttcctttgtg tgaaggagac acctcccgag 420
caatcctaac tcatccagct cacttttaac aaagcaaaga gcagagggca ctgaagactg 480
gatggctgtg aatggtacac cttgggggtg aaaccgtgtt ggcaggaacc tggtgataaa 540
agctgcctac ttcctgggtg tgtgaatttg cacatatctt tccccctcac tggacttcag 600
aagcctactg tgaactgggg acgatgctat ctactttccc tcctgaagcc cttctaactt 660
tcaaatgtat ggtcctgggg ccatgagtc tgcacagaaa ctgcagcctt gccagattgc 720
ttcccttggg gcagaaaagt gtgtgtgtgt gtgtgtgtga aatatacgta cggttttacg 780
tcaaaaacag tcgaatatca gctatttcat atgggttcacc ctaatgtacc tgcctctctc 840
tttggcttta ggtctgagaa tgacttgtct ttgtcaaggt atactattgt tagaaacgca 900
ttaccaaagt catctcttct gtcggatcag cgtattccta gattaggaat tcaaattaat 960
gaaaattcac atatgaaagg aaaatccatt gctatttctg gagaggacct cagtcctggg 1020
cttttccctg gcattgctac ctgggtgggt gctcaccact caggtgctgg tgttggaagg 1080
caggaggagg aagctgaaat cctgccgatt aaggctaatt aacagggttt aggtgcctaa 1140
ttatcatgac tcagcccggg acttatgggt agccgtgcag gccaggtgag tctcttatgg 1200
acttctctc agactgctct ttctcatttt gtcctgatga gatattgaca gtcatgtcca 1260
cccgttctt catccatttc ccgtcttggg ccctggaagt acgggggcct ctgtaggctg 1320
cctagggagc cctggctttg ctcttcgtgt tgggctcact ccatgatcag gagccggtgg 1380
gactggctct tctgattct tactgtctgt ggttccccat cccctacggg gagcctgctt 1440
tgggccttga gctggataga gagaagagct ttggggccca gctggttata ggagctgagc 1500
ttttccacac ctctctttgt taacccttgg aaacagacct gcctttcacc tgacctctt 1560
tcctacctgt ctggtctgac ctgccctctt tgaaagcact catcacctag ttttactagg 1620
ctgattggca gatgtggaca tgacaggtgt ctatcgagat aggtgtctaa ctagttaggt 1680
gtctcaggat tggacagcag aataccattc caggggtgca cagacaggcc tctcctaccg 1740
gaacatgagg gatagacgtc tgggcattct gaaccagag gtcagagtag tcacaagcgg 1800
agccctgggg agcgagggcc ccagggccgt ggtgttcctt gccctgcgct cactgaagtc 1860
caaggccagg tttcagaaat agtatgtgc ctgttcctga gatccttcac acctggacac 1920

caaccagac aaagcctgac ttaaaat tttt gatactgtat tcatcgtgga atttttcaat 1980
aactctgatt tttaaaaaat actgcattgc aatatgattt accttgatta ctgaggctct 2040
tttttttttt ggcacccctt taaat tttta cccaaggtga gggcctcact ccactctata 2100
cccagccctg cctgcccctc acctggacct gtgagagggg cttaggtacc actgtgaaat 2160
acgttttaaa tttttacttg cctttccctt caggctcctga gtgaggcagt ggctctcttg 2220
cgggtgctgc atttaaata gagtgtgtag gcttacagca atgaaacatc taggagcttt 2280
taactttgga tctataacctg ggtgtgacat ttccttggtg ttctctggct gcctttcttg 2340
ctctgcagcc ctgagggcac ttgtgtgtgt gtgtgttctc tggagaaggg aagtgattat 2400
ggcagagagg ctcccttaga ttctctctt aaacctctt ggaacatgtt tgaattccag 2460
aagtgaatga acttcattca ttctctctc cagatttcag aagggactaa agtgaacgga 2520
ggctttttca ctccctggca tgctaagagc cacattccct agctctgtgc ctgcacagtg 2580
agtcttcaga atttgccca tcacaccctc tgctagtatc gttccacca cctcctcat 2640
cctctgtcat ctttatttca ttctcatcgt ttatctctac ctccagttca gatgccatgc 2700
tggtgtggc tcttttctt atcaccatca gagtgaggca aagatgtatc ctggcctagt 2760
tataaagacg aataatacat gataagaaat cattaat tttccacgtg gggggcggtg 2820
ctgtcctagt gattcatata tatataattt ttgactcctt acaataattc tgggatgtgg 2880
gtattacccc catttaagaa tgtggaaacc aaggctctga tggctctgta atttgccag 2940
ggtcacacag ctaggaagca agttgctgat ctgcttggtt ccaaagtcac ctctcttttt 3000
cctctgagca catttctaag ccactactta gaagctcttg agataaagtt ggcctagctc 3060
aggtccaccg aggttttgag attgcccttt gcccaaggag gagttgtgtc cttggctcac 3120
ctgtcatctg cctgtgactg gacttgaacc ctgcacgtc tcagctgaca tccttgatgc 3180
tgctggctgc ctctctgcc ctgtttctc tccatgactc caggggtttg aagcacacag 3240
gagctggaca tgtcaattct gtagctcttc tccaatacc actgaaggcc gtgagcctct 3300
ctcctgtttc cagcctgcag gtgccctgtt gctgctcttc attccagctt ctctcactt 3360
ttctctcagt ctcttgagct tggaagcctt actgtagctt gtgtctctc cctgggcact 3420
tgaggtcagg cttttgcctt ttgtcacat tgagccacat gcctttgata cacagttgta 3480
gcaaagaagg gaggtgatga acttgctcac tttctttctt gatttcctc cctactcatc 3540
ctgcactccc caccgaaacc cagatatctt atagtctaag gcttgtagag gattaaggaa 3600
aggaattgga gatgggtttt acttagttca cagaaaagct ttctttggga ttttctctcc 3660

cccttagggc ttttaagtct aggtgaagtg aaagttcaca catgtgtttg tttggttgct 3720
 ctgtaattag ctactagttt ttatccctag accttctctg ctccagtgtc ttgttcatgt 3780
 gtcctgaccc cgtgtccttg aattcccact ttgctttggg atttaagtta ttgtatgttg 3840
 tcaacaatat ttaaagatga aaaagtcctg aaggaaactt accagattct ttcctttggc 3900
 tttttttttt ttttctttcg aggtactgta aattgttaac tagggatgcc aagcaggctt 3960
 ggttcaatgg ctaaacctct tattgtatta cagtgtaatg ctgatctcag cctgggtctca 4020
 atgccagagc acacagagac ttgaataaaa ctgttataac gatt 4064

<210> 460

<211> 2258

<212> DNA

<213> Homo sapiens

<400> 460

attttcttga ctcttaatta agcactggag gtggtgtgtc taattagaga gaaagacatc 60
 tagagctacc catgcatcag tgtgtacagt ttgtgcactg tatgaacaca cagcagagga 120
 ggcaaattggg gctcaaattc agccctaagc ccagagcacc tgctgagtct gcccagaagg 180
 ggcacctttt tctaattcgt ctgtctaaag ggaagctttt ttttctaatt ctcaacaaga 240
 atcagagtgtg taagaatttg ggttcctgca atcattttta aattgatttt attttttgtt 300
 ttttagagac aaaggctcgc tctatcgccc aggctggagt gtggttggcc ctgcagacag 360
 ctatgattct ctagttaacc tatttggatt gaatcaatca aacggtcctt acaaccaaat 420
 gtcccagtct ggtttatagc ccatgctata agccagtagt tcttaaactt tagccagcaa 480
 cagaaccatc tggagggctt gttaaaacaa ttgctgggct agaccctcag agtttctgag 540
 tcagtaggtt tgggggtgggg cctgagaata tgcatttcta acaagtaccc tagggatgct 600
 gacgttcgag gtccagggac cttactttga gaaccagtgc tagacgctat agctataggc 660
 aaggatttat tttggatctt ttccatgttt ccatgtttcc atgtttccat gagagtctca 720
 ctgagcctgt ccagaacaaa taaaaatagg ccacttcagg taccceaaaa tggagtggaa 780
 gggtaatgct ggtgggcgct tagcctgggt accagtggca catatggccc acagttccca 840

gaattacttt gaatatggga ctgagaaggc actctgtgga caggagtcac ttccattcat 900
ttgattcact gagtgtctgc atctgtgtga tgaaggagcc actgttttcc tggtcagcag 960
ctcagctgtg ggtactgatg gttgcagaag cttacatgaa attaacggtg tagttctcag 1020
accactgctg agtgaaaagg ctgcttgttt tggctggggc tatgtcagtg tatgcagggg 1080
gagaccact ctggggagtg caaggtgtcc taatgatcca cattcactaa agcccacagt 1140
gttgttttgt gctcagataa ggaaaagggt ttttgcacaa tagactcctt agttgttaaa 1200
tgcctccact tcaactcatcc taagtaaata agtgctctct ttcgaaggtc tccagattcg 1260
gggagatctc ctgtttcctt tgatacatta ttctagcctt gggctcctgt tgtaatccca 1320
gaattctttt tttttttttt taaagagacg aggtcttgtt cggtcaccca ggctggagtg 1380
cagtgtctgc atcatagctc actgcagcct ccagctcctg ggctcaagtg atcctttcac 1440
ctcggctctc tgaatagctg agactgcgga catgcaccac tgcgcccggc aaggggtggt 1500
ttcaaagtgt gtctgaatca aaggactgct ttacttgac aggatgctt agacagcttt 1560
gatcttgaag tttgggataa attaggatgg gtttgaaacc catctaacag agaatgatgg 1620
agccatgcgt atcaactatg taagcatcaa acatcctgag gttcctactt agtcaataat 1680
tctgtggtta ttttagacca agcttctata attacatctt cattatgctt ggcagacagt 1740
gctatttcca acacaggaag cagcggcctt gcctttgttg ttgtccttct aggtagcagt 1800
tgaagccaaa tggacagaaa gcccgagaca acatgaagtt gttctacaag ttattttgga 1860
gaaattgact taccatacca ctcatcaacc catgcaaaag cctgtctatg tccaatcagc 1920
agaatgtctc ggaccaccta aaaagtaaaa gaaggagact gaaataatag catctttgat 1980
gaaaactatc tggaagacaa gttgttaaca attctgggga tcttggtgat tacagagttc 2040
ttaatccctc tgtccatagg tgatgacaat tacaggctgc ctataggctc tatagtgtc 2100
acacacctcc agcccttccc catggtgtac acacacttgc agtatattca tctctttgtc 2160
ttatttgaga gtagggctgg gtgtgtgtac aaactaatga caaatacttg acagtcacac 2220
agcagtgata caaataaata tctaggttaa ttaccttg 2258

<210> 461

<211> 2669

<212> DNA

<213> Homo sapiens

<400> 461

agtgctgaag	cgggggtggg	gcggaggcga	gtctgcgggg	gttttggggg	gtgtcgaggc	60
ctctattctg	ccccagagcg	ctggcgaagg	cccccttctca	gcccgccttt	tcctttctcc	120
cgctccttct	cctctactaa	gtgtagacgc	agggccctt	ggcctagctt	cgatcggtcg	180
aattcagagc	acgtccttcc	gaggtgaagg	aacgcgaaac	tccacccatc	cgattgctgt	240
tcggctgcgg	gcgggtcctt	tggtcgggct	gaccctgggt	gagcggcccg	gagccaagac	300
tcgaggtagg	gcctggcggg	cgggtgatgt	cacactcctc	tgtgacacgc	gaggctcctc	360
agttacttag	ccaacggcag	aggcggaag	tgagaggagt	ctggggctgg	ggctgccttc	420
caggccccacg	gggcggcccc	gctcttttctg	gattgggttac	ctttgggcag	gtgaggtggc	480
tttgctttgc	ttggtcttga	ggttttgtgg	gcgtctttct	aagtctgctc	agcaaggggcg	540
tcgttgggca	gtttttatct	tgggcctact	tgctggacct	gtggaacaa	gtaggctttg	600
gtatctttgt	atatttactg	agtgtagaat	tactaccggg	tgccagcccg	ggctgcttgg	660
ggtcacacgc	ctttcattga	ccacccccac	aacaaaaatc	actatgaact	tgagactgtg	720
ttctagcaac	ttgtgaatgt	gtaaccacgt	agaagggtg	actgtgcttg	aaacagacaa	780
ggatttttaag	gtcaaagagt	ggagactgct	gcacggactc	tggaaccatg	aacatatttg	840
atcgaaagat	caactttgat	gcgcttttaa	aattttctca	tataaccccg	tcaacgcagc	900
agcacctgaa	gaaggtctat	gcaagttttg	ccctttgtat	gtttgtggcg	gctgcagggg	960
cctatgtcca	tatggtcact	catttcattc	aggctggcct	gctgtctgcc	ttgggctccc	1020
tgatattgat	gatttggctg	atggcaacac	ctcatagcca	tgtaactgaa	cagaaaagac	1080
tgggacttct	tgctggattt	gcattcctta	caggagtgg	cctgggccct	gccctggagt	1140
tttgatttgc	tgtcaacccc	agcatccttc	ccactgcttt	catgggcacg	gcaatgatct	1200
ttacctgctt	caccctcagt	gcactctatg	ccaggcgccg	tagctacctc	tttctgggag	1260
gtatcttgat	gtcagccctg	agcttgttgc	ttttgtcttc	cctgggggaat	gttttctttg	1320
gatccatttg	gcttttccag	gcaaacctgt	atgtgggact	ggtgggtcatg	tgtggcttcg	1380
tcctttttga	tactcaactc	attattgaaa	aggccgaaca	tggagatcaa	gattatatct	1440
ggcactgcat	tgatctcttc	ttagatttca	ttactgtctt	cagaaaactc	atgatgatcc	1500
tggccatgaa	tgaaaaggat	aagaagaaag	agaagaaatg	aagtgaccat	ccagcctttc	1560

ccaattagac ttcctctcct tccacccctc atttcctttt tgcacacatt acaggtgggtg 1620
 tgttctgtga taatgaaaag catcagaaaa gcttttgtac tttgtgggtt cctctatttt 1680
 gaattttttg atcaaaaaac tgattagcag aatatagttt ggagtttggc ttcactcttc 1740
 tggggttccc ctactccct tttttgtcaa ccccatctgt agcctcttcc tctactcagg 1800
 cagtcgaccc gccacgatga gaagtgggac cagcagaggg cgccaacttc aggagtccgc 1860
 ttcccacca ggcttcattc acccagtggc cctgaactgt ttggtagagc caccggccc 1920
 ttccttcctc attgttgttt ggtatgcgca cagttcctgt gggactgggc cgtgagtttt 1980
 ccattggaaa gaagttcagt ggtccattg ttaactcagc ccaaacttc aactgtcagg 2040
 ccctacaaag aaaatggaga gcctcttctg gtggatgctt tgctccctct gagctgccc 2100
 tgctggctg gcaaacacac ctttctgctt tgccttcaca aaagtaatgt gttcccttc 2160
 ccacccttg cctgaccctc agggagtcag cctgcttcca tccatgggtg ggaagacttc 2220
 agcacaaaagg aaagactaat tcttgtcagg catTTTTgaa aaggctgatt atgtgtatca 2280
 aggtacagca tcgtagggtt cccctaaact tgccctgttt ttgttttttt agtttgttat 2340
 ccccttactg agcggcctct actaggtggc tgtgattaaa tgtccaagc aaggataggg 2400
 aaggggaatg gttgagcctc tggagatcat tgtaaccaat cctgccagac ctgtttgggg 2460
 cagtggggag caaacctaga taaggacctg tttggggcag caggagcaa aatctccttt 2520
 aacaaccaag cagttcctca ttcacatcaa cagagctagg cctaagattt tgagttaaca 2580
 tctcttgaag ccaaactcca ctttctgtgc tttttgcttg ggataatgga gtttttcttt 2640
 agaaacagtg ccaagaatga caagatatt 2669

<210> 462

<211> 2370

<212> DNA

<213> Homo sapiens

<400> 462

tgatgaggcc cttgccttca gctgcttcac ggagctcatg aagaggatga accagaactt 60
 cccccacgga ggcgccatgg acacgcactt tgcaaakatg agatcgttga tccagatcct 120

ggactcagag ctgtttgagc tgatgcatca gaacggggac tatactcact tctactttctg 180
ctaccgctgg ttcctgctgg atttcaagcg agaactcgtc tatgatgacg tcttcttgggt 240
ctgggagacc atctgggcag ccaaacacgt ctcctctgcg cactacgtcc tgttcattgc 300
gctggctctg gtggaagtct accgtgacat catthttggag aacaacatgg atttcacaga 360
catcatcaaa ttctttaatg aaatggctga gcgacacaac accaagcaag tcctgaagct 420
ggcgcgggac ctctgtgtaca aggtgcagac tctgattgag aacaagttag gggcacctca 480
ccccggcagc ctacagccaag ctgcccctgc cccgctcctc tgcttacttt tccccattc 540
ttttgacgct aagccaccct ggtcctgacg cctcccctca cttagaaaag gcatacagga 600
ggccgggcat ggtggctcac acctgtaatc ccagcacttt gggaggctaa ggtgggcgga 660
tcacaaggctc aggagttttg agaccagcct ggccaacatg gtgaaacccc atctctacta 720
aaaatacaaa aattagctgg gtgtgggtggc gggtgcctgt aatcccagct acttgggagg 780
ctgaggcagg agaatcactt gaacctggga ggtggagggt gcagttagtt gagatcacgc 840
cactgcactc cagcccgggc gacagttcaa gactccatct caaaaaaaaa agaaaaggca 900
cacaagagtc cctcacacat ctctcttggga gtctgggatt ccatctgttg tattttctcc 960
ttttttctcc tctgtctgat gccagaagat acttgttttc ttcttttcaa gaaaagtatc 1020
tccccacata ggcggtggac caaaaaagtg taggcatgag acggtcagag ctctttgggg 1080
tcctgctcag agtccccag gcagggcaga gtctgtatcc tgctgccatc ttgcaaggga 1140
aaaccgctc tccttccaag tattgggtct tggaaagggt tgtgtttgggt gaaagccact 1200
taatgggtgt ggggtgcagc ttttctctaa gtgcagttac tctactagga caaaggagga 1260
aaaggaaggc agaggctcagc cagggtagag ggtgatgtct gttttccttg ggaaacatct 1320
gctgatgaac tgggtccagg gccatgctag gtctgggaac aatcctctcc aggtcttcac 1380
acagagtatc accaatccac aaacagaccc gaagtgaact agtttactct gcctacctgt 1440
cctttcaata gagcagtctt tcccgtctct ctgttctgag aatgcacccg gaatggggga 1500
aaccagcaa gcagcagaga gaaaggctct tcccgggaga cctgccgcct ctagggtggt 1560
cagagaatag cagctgggat tttggagagg gagaggatag gtaaagcagc gtattgaagc 1620
atthgcggag ggggtgtatta gtcctccac cctgagcaca ccaggacggg gatgcactct 1680
tgccttgctg gcttgtaaag gcttctttcc cttgggtatag caacttcaac tgcacctgaa 1740
cctccaacct ctgcccagcc tctgggtgcag ggtggataga ggtctagcca gcccttactt 1800
cctgaagaga gctctgtggg aaactcgagg ctacagtagc ttcccggctc ccagctccta 1860

ccctaccccc accaaagcag aaacgggaga cggcaacgtt ctggctgcca ttagacttac 1920
 gtctccctcc cctacgtccc ctagcttccc aagacaggaa gaaatgtgca aaaggcccct 1980
 ccggagaaaa ctgtattttg ccgttcagct gttctttaca gaggatgtta ttttagtgag 2040
 acccaggtcc tagaccttct gattcctatt tatTTTTTTT acagactagt ctcaaagtac 2100
 agcacaaaat ctcttctctg ctttctcttg tgatgttcca gagagcatct gtggttgtga 2160
 tttggaataa gtcataTTTA tttggTTTtT tgtgcctatt cagatctctg tatgttTgtgt 2220
 gtgtttctgt gtccTggaat tggatgcgtg ggactcgttc tgtccgcgga gtgcactctt 2280
 tttttcagtg tggcccat atcttTgtaa tgtttgctga agagttgtgt ctatatatag 2340
 agaaaatata tataaacaga gaaatatgtg 2370

<210> 463

<211> 3042

<212> DNA

<213> Homo sapiens

<400> 463

gcgagtcgcc ggtcgccggt cgcggcggag cctgggcgct gagtgaagaa aatgaggcac 60
 gaggaattgt taaccaagac cttccaaggc ccagctgttg tgtgtgggac tccgaccagc 120
 cacgtataca tgtttaagaa tggcagtggt gactcggggg actcttctga agaagagtct 180
 caccgtgtgg ttttgcggcc ccggggcaag gagcgccaca agagcgggtgt ccaccagcct 240
 cccagggcgg gagcaggtga cgtggtgctg ctgcagcggg agctggccca ggaggacagc 300
 ctcaacaagc tggcgctgca gtatggctgc aaagtaagac acccctcagg ggccctgccc 360
 cgctccgttt caaggaacac ggggaactca ctgcaggggtg ggtgcccttg ccgcccttct 420
 taaccctgcc aggccgtcag gagaggcctg ctgtagcagc caaggactcc cctatttagc 480
 cagaattgga atgcaggtgg gagtaccttt agttcccaac cctggccccc aaagaggggag 540
 ggtagcgca tttctttctc tgcagggaac ttctcctttt cctgttttct ccacactgaa 600
 attctgaaac cttttttctt ctttcgagca cattttattt tagacctaat ggggctggag 660
 ataccaggca gaatttaatt ccggatttct atgcattcag agtgattaac aatggcaaag 720

ttgcagatat caagaaagtc aacaacttca tcagagaaca agacttatat gctttgaaat 780
ctgttaagat tccagtgaga aaccatggga tcctgatgga gaccacaaa gaactgaaac 840
cccttctgag cccgtcttcc gagaccacag tgaccgtgga actgccagag gcagacagag 900
caggcgcggg caccggtgcc caggccggcc aactgatggg cttctttaag gggattgacc 960
aggatatga gcgtgcagtg cagtcagaaa tctttctaca tgaaagtac tgcattgaca 1020
cctcccatca gccactgctc ccggcacctc cgaagacgcc tatggatggg gcagattgtg 1080
gcattcagtg gtggaatgct gttttcatca tgctgctgat tggattgtc ttgcctgtct 1140
tttatttggt ctactttaaa atacaagcta gtggtagagc ccctaatagc ttgaacacaa 1200
ctgtcatccc caatggctcg atggcaatgg gtacagttcc agggcaagcc ccagactag 1260
cagttgcagt gccagccgctc acttctgcag acagccagtt cagtcagacc acccaagcgg 1320
ggagctaagc tttgttttta aagactcggc ccagctttag caattggctg ttgatgtgcc 1380
tcagctgtca ctggcgatgt cctaggggtg ctgcattttg cttccgggga aggatggaca 1440
cttttcagaa gtcactgcag tattcccaat tgcaactggc ctgggcatgg ccttaccag 1500
tctaagctgg caggatctaa aacagcagcg acctcgccc ctatccagag aggtgcagca 1560
agagagccat ttccctgtga catttagtgg actggccagt tcatagcagc actgtgagga 1620
cccccaagtt ggacgtgctc ggagggaaag atttatggcc tctgtcgagg gacctgcagc 1680
gtgagagcca gtggcatctg cgcggcttgc ctggctcttg ctgtatctc acttctgtg 1740
gagcggggat tggctctgag aaggagtgtt ctctgtctgc ctggcaaagg tgctgtggaa 1800
taggcttggc atgccaccct gttttagaga gtgacagtta cagttgtaac aagcctactt 1860
catattggcc ccctcagtta gcctttttga ggcaatgcc tttctagagt tgaaaaagcc 1920
ctggacccaa actgcggcac tgttgaataa agggcagtcc tactctgtc cttttagagt 1980
ggcttagtgt gacacacagg catctcccag gccaaagcaca cacaggctgc gccagttcc 2040
gcaggagccg tcccacagcg tggctctctg gattctccca cttgtcctc ttggaaggag 2100
ctcttgctgg ccagtgtttg gaggggagga tgagtgcctg tcaactgaggc ctactatgg 2160
ttggcgtctg aagctgggcg gtcgtcaggc ctgtgctgag agccgcagcc cctgtgcaca 2220
cctaacacag ggcgctcccc ctgctgcttc cctggctcag ttcttcggag ctccagagt 2280
agaaggccgc ttcgtccttt ttctctgggt gatgccctta gaataacact atatgcaatg 2340
taactcacia tgttccagga ccaaagactt gatggagggg ctagaggcga cccttgttgt 2400
aaaaggcgat cagaacacct gagggaggaa ggggcttgca gttttccag cccttctcgc 2460

tgccaaggca gcagtgggtgc tgtggatggg ctggggactg cgggacagag cctgctacta 2520
 cttgggagtt ggtgctgccc tgtggcatgg aggggtggga ggggctgaga tggctgctgg 2580
 cccggcctcc aagagttctg gacaggagggc agacactgcc cagatgctcg gtggagggac 2640
 agtgatggcc tttgactcat gaggcctgga gaaaagtatc aaaggtctca ccatgtaaga 2700
 gtgatttctg atttctctcc tttcagttgt gtgaaaaaac agctggcctg ggttccatta 2760
 gcaaattaaa tcactttaa tcttaaatga gagaccagaa tgatcttcag gataaaaaga 2820
 acttctgaat ctctgcaata ggaaatgttt cgatcatgca agtgctttcc cagccaaatg 2880
 tctgtgctct ctgtgtcact gagggccaca gggttctcta acatctgtca ctgtcacttc 2940
 accaggcagg ccttggagtt ccatgacaaa atcacttttg tcagacaaag aatgtatcct 3000
 ttacttttct caaatggaat aaaattattt cttctgtgga gg 3042

<210> 464

<211> 2038

<212> DNA

<213> Homo sapiens

<400> 464

tttgcttcca agtcctctcg acggcctgga gctgtgttga ttaagccccg tggctctgtt 60
 ttgggttcac cttcacttaa gattctgcgt cctgttccct gtcactgtgt gtggatgaac 120
 tgtggctgct ctctgtctg cctgcaccg tgatgggaca tgccctgtcc tgacccttg 180
 gccactgggc ttgtcatgag gtccaagccc tcacctgtcc cactttcatg accatttctt 240
 tgtgttggga ggtgaacagt accatctcta cctctacaaa cacatttggt cttgtcatag 300
 catgacagga ctgcagggt ttgtgggtac caggcctgtt gggaagaatt atgtagattt 360
 tccttaaaat ggcctctctc agcaacttgt aaaacttgcc tgtgagatgc gtccagagct 420
 ccacaaactg ctgggtgttc tgaatgtccc acatacagct ccagggtggt caggccccag 480
 ggctactgtg gcaagagggg gccagcaggg ctgtgtttct gtctgtcaca ctttctctt 540
 gttcaaaaca catgtatctc aagcagctat atacaaaact cataaaaatt aaagatggtc 600
 agccagtgcc aggaaatgtg gaggaggagt tggatcataga atttccatgg tgggacaaga 660

gaattacca tttggccttc aacgagaggt tcccagagtt gcatcctttc ctttccttaa 720
cagctgggttc atgtaggcct tgttggtgctc attctgggag aggggaagatg cgcccagagg 780
ctaggcggta tgccctggga gccatgagaa cccagccaag ccaggtgaac gcagcttctg 840
ctactgcacg tgcccttatt atcatctgag caagtttttt aagtaccctg caggtgggac 900
caacatttta tagccatgtt tcaaccatta atgactttta aaccttctac aatcttgaag 960
atctttataa tccatctttc tcgtgaagta cccacaggcc tttgcagctg acactctcag 1020
agcatgggca gaatcactgg tagagaaaaa taaccaaagg ggtctagaca gagactttgg 1080
ctttatgcta tagaatgtac attcagttgg agagagcacc accttattag tctgggacct 1140
atttcacag agatggattt tctgaggaac ctgactactc agtagaaca ctcaaaagaa 1200
actaaacttt ccatttcggt ttggagtaca gaacattttt taaaaagaat taaacacagt 1260
gaagtttagg ttattcctga atgacgccag gtttctgac tttcccatct ggctgaggtt 1320
gccattcttg ccatctaatt gaaagtataa tgggtttcag gtttttagga gttctaaaga 1380
attacgcttt ccatagagaa taagaggaag aatgttctac atagtgggga gagaggatga 1440
gggttggcag tgtggttaaa gagcaaaacc accaagaaag agtcagagcc ctgaggacgt 1500
ctctgtccgc gtggttcttg attctgagcc agaaggtagc ttggtatagc acgggagttc 1560
aaaatgtggt gtcccaaagg aatcacagtg tggaccttta cagttaatga caggcactgt 1620
ccccagctt gggtggcaaa ggccagttag ctcagggtg aggggcttac cctccggcag 1680
ctcagagtcc agaacatctt agtccggcag ctcagaatca gggcaccttg cctcccgggtg 1740
agctcactct gctgctagcc ttggtagaaa aggaacagga ttatgggcag tattttatgg 1800
ctggcatgaa atagataccc ttttctcctt tgatagagat ttccttcttt aaatatgaaa 1860
ctgaagcttt gaggacttaa ctagacttcc ttttgaaaag tttcagaaaa gctcaggtgt 1920
ggccaggcac gatggctcat gcctgtaatc ccagcacttt gggaggccga ggcgggcaga 1980
tcacgaggtc aggagatcga gaccatcctg gctaacacag tgaaaccccg tctctact 2038

<210> 465

<211> 2497

<212> DNA

<213> Homo sapiens